This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

0014047M

ETRUSCAN BOLOGNA.

SYNOPTICAL TABLE OF THE PALEO-ETH

BY CAPT. E. RE M.

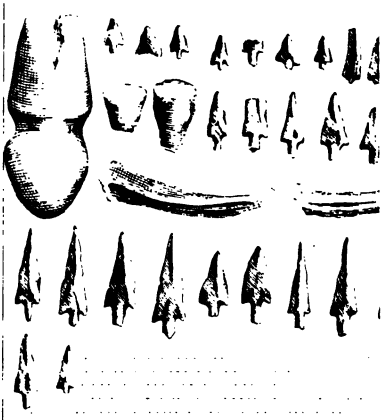
1
SILEX IMPLEMENTS FROM THE TIBER BED.

2
MANUFACTURE OF SILEX IMPLEMENTS NEAR CORNICULUM.

3
SILEX IMPLEMENTS FROM LATIUM.

4. NEOLITHIC TOMBS OF CANTALO

5
INSTRUMENTS SCATTERED ABOUT THE



GEOLOGICAL SECTION OF

ɔGICAL REMAINS OF CENTRAL ITALY.

ɔssɪ 1866-7

ɪNA.

LCANOES OF LATIUM

Vincent Brooks Day & Son Lith.

ETRUSCAN BOLOGNA:

A STUDY.

BY

RICHARD F. BURTON,

AUTHOR OF 'PILGRIMAGE TO EL MEDINAH AND MECCA,'
'CITY OF THE SAINTS AND ROCKY MOUNTAINS TO CALIFORNIA,' ETC.

LONDON:
SMITH, ELDER, & CO., 15 WATERLOO PLACE.
1876.

[*All rights reserved.*]

221. e. 272.

Athenæum Club,

Pall Mall.

Nov. 1, 1875.

Dear Lady Otway,

Be pleased to consider this little volume a sign that the Wanderer in Bologna has not forgotten your gracious and graceful hospitality, and believe me

Ever yours sincerely,

RICHARD F. BURTON.

Lady Otway.

PREFACE.

I NEED hardly say that this little volume offers no novelty beyond introducing to the English reader the valuable results of *Etruskische Forschungen* in modern Italy. It can hardly be termed uncalled for. The discovery of the Bolognese Certosa which took place some six years ago, requires, for study, reference to a number of pamphlets and scattered letters, which we must not expect to see in our libraries. Other 'finds,' noticed in 'Etruscan Bologna,' are even less accessible; and even my own list is not quite complete.

Like the Gipsy dialect, the Etruscan tongue has fascinated a host of scholars. The latest result is a belief that in it 'we have a waif of one of those many extinct families of speech which have gone to

build up the languages of the present world' (Sayce). For the moment we can only say that the problems of its origin and its position have not been solved; that some Italic vocables have been detected, or rather guessed, and that there are, perhaps, a few 'Turanian affinities,' possibly derived from Finnish, and pointing, haply, to an age when the Aryan limits were not definitively laid down. Some day, as linguistic science is in despair, we may bring to light a long bilingual inscription, that will prove a veritable Rosetta Stone. Hitherto, the only keys applied to the ethnology of the mysterious race, which taught Rome her arts and arms, have been 'glottology' and comparative philology, while not a little violence has accompanied the application. In this volume, however, we shall find Professor Calori, to mention no others, searching the sepulchres, and supplementing linguistic by craniological and other physiological studies.

Finally, 'Etruscan Bologna' attempts for the first time to describe the North-Eastern, which may be the eldest, Etrurian Confederation, while the

works of Dennis and other notable English authorities treat mainly, if not only, of Middle Etruria, almost corresponding with modern Tuscany.

I must again conclude with my old apology for minor sins of omission and commission—the 'single revise' excuse.

RICHARD F. BURTON.

HAYDARÁBÁD (DEKHAN):
March 4, 1876.

CONTENTS.

PART I.

THE WORKS OF MAN.

SECTION		PAGE
I.	NEW BOLOGNA	3
II.	OLD BOLOGNA	14
III.	PUBLIC COLLECTIONS OF ETRUSCAN ANTIQUITIES AT BOLOGNA.	21
IV.	PRIVATE COLLECTIONS, ESPECIALLY THE VILLANOVA.	48

PART II.

THE ABODES OF MAN.

I.	VARIOUS FINDS	79
II.	FURTHER AFIELD, THE CERTOSA AND CASALECCHIO.	93
III.	TO MARZABOTTO, MISANELLO, AND MISANO . .	107
IV.	CONCLUSIONS	137

PART III.

THE ETRUSCAN MAN.

SECTION		PAGE
I.	THE ETRUSCAN MAN	149
II.	THE ETRUSCAN MAN (*continued*)	163
III.	CRANIOLOGY	175
IV.	PROFESSOR CALORI	187
V.	THE ETRUSCAN LANGUAGE	212
VI.	INSCRIPTIONS	233
VII.	MODERN BOLOGNESE TONGUE	242
	APPENDIX	263
	INDEX	271

SYNOPTICAL TABLE OF THE PALEO-ETHNOLOGICAL REMAINS OF CENTRAL ITALY . . *To face Title*

ETRUSCAN BOLOGNA

PART I.

THE WORKS OF MAN

'Le moindre débris échappé des ruines de l'antiquité nous en apprend plus que tous les livres'

RAOUL ROCHETTE

SECTION I.

NEW BOLOGNA.

I PROPOSE to write a study of the old 'House of Aucnus,' the venerable ex-capital of Northern Etruria, promising never to borrow from the guide-books, and premising that the sooner they borrow from me the better for them. Not a line concerning the ancient city of Felsina, lately brought to light, appears in Murray (1869); and right few in Baedeker (1873). Travellers, therefore, daily pass through without even hearing of our many admirable collections of archæology, and without seeing that excavations are being pushed on with exemplary vigour. The stranger-herd visits the Art-galleries, asks after the Sta. Cecilia of Raffaele and the S. Sebastian of Francesco Raibolini, 'detto il Francia;' it stands wondering under the shadow of La Garisenda, the most towering of the leaning towers; it admires the long miles of arcades and—straightway it is gone. Still 'Bononia docet,' and

we students can now learn from her the tale of her older world.

And first of the site. The rich plains of Lombardy to the north-west, and the sub-Alpine maritime lowlands of Friuli and Venice to the north-east, Circumpadane Etruria forming the thigh-piece of the Italian boot, here abut southwards upon the Apennines, the mighty suture which, immediately north of Genoa, sweeping from west to east, gradually assumes a south-eastern trend. Were I speaking geographically I should say that they begin in southernmost Italy, bend round the north-west limit, form the Alps, bifurcate at the great European nucleus of Switzerland, where they send off a branch to form the Rheingau; and, after becoming the Dinarians, they terminate in Greece, the whole being shaped like an elongated arch or a tuning-fork. The great steppe of Upper Italy is mostly composed of riverine valleys, feeding the Adriatic Gulf; the main trunks, commencing with the easternmost, where Italy geographically begins, being the Isonzo, Tagliamento, Livenza and Piave, the Bacchiglione and Brenta of Padua, the Adige or Etsch, the network of the Po Proper, and the Po di Primaro *alias* the Reno. Many of these historical

streams run, it is well known, upon planes several feet higher than the adjacent lands; and the only tunnel between the Duchy of Gorizia (Görz) and Bologna is that pierced through a vein of the extinct Euganean volcanoes (*Colli Euganei*) by the ex-Duke of Modena: like many an English gentleman of the old school, he would not allow his senses and his feelings to be wounded by the 'destruction of all feudalism.'

Near the south-western extremity of this noble prairie lies BOLOGNA, with her head resting upon the gentle slopes which represent the foot-hills of the Apennines, and with her feet extended towards the broad, fat Reno Valley. Her site is in the heart of the temperates; and, though she complains of wintry cold and summery heat, she is amply blessed by 'Nature and Nurture.' There is nothing bad in Bologna but the water, which, hardened by the dissolution of calcareous rocks, chaps the skin and offends the internals. Presently, however, the old Roman aqueduct will flow once more, and the one real nuisance will be effectually abated.[1] Nothing will then remain but to cheapen and to improve the

[1] See *Analisi di alcune acque potabili della Città di Bologna*, by Cav. Domenico Santagata, 1872.

post-office—a civilized instrument which sadly wants refurbishing throughout Italy.

The characteristics of Bologna are the Arcade and the Leaning Tower. The former is of every age and shape; we even find the rude wooden architraves and the post props—a palpable survival of the Etruscan temple which we shall visit at Marzabotto. The finished arch resting upon the classical column also dates from the days when it was apparently first employed, namely, in the Diocletianian Palace at Spalato. The result is that of an English Chester and a Switzer Bern, made artistic and beautiful, combined with the timber appurtenances of Tours—the most mediæval amid civilised French cities. Of the hundred towers lately described by the learned and laborious Senator Count Giovanni Gozzadini,[1] many if not most of them are distinctly out of the perpendicular. This is not the case in the adjoining cities; and I would explain the fact by the ground having been so much worked by successive races and generations of men. All are mere deformities, rickety minarets, which, as the courses of

[1] *Delle Torri gentilizie di Bologna e delle famiglie alle quali prima appartennerono: Studii,* Bologna, 1874, with plates. The large 8vo. is considered the most interesting of Count Gozzadini's twenty-four publications.

masonry show, were begotten to be vertical. The numerous palaces of brick, without and with stone dressings, show that the master-hand of Palladio, who adorned Vicenza with the meanest of material, has passed here as at Milan; and suggests that New London need not go to Scotland for her granite—a material to be used sparingly, as it 'kills' all its neighbours. The 'Palazzo' of the humblest noble is vast enough to contain two of the largest boxes that poor Belgravia can boast; and the inclined planes of staircase, evidently made for the comfort and convenience of the grandee's destrier, contrast wonderfully with the companion-ladder of masonry which, rodded and carpetted, suffices between Teuton-land and Scandinavia for the millionaire of the North.

These are features of a bygone day, yet Bologna is not without her 'modern improvements.' The Via Miola, lately repaired, is one of the handsomest and the most striking in the whole peninsula. The 'Seliciata' (slab-pavement) is gradually extending, and, where the handsome equipages pass, flag-bands have been let into the torturing cobble-stones. The thoroughfares have changed their saintly names for those of modern patriots; and the Strada di S. Felice can hardly complain that

it has become 'Ugo Bassi.' Clubs abound; besides the Società Felsinea and the Domino Club, the latter on the small scale and the exclusive system which makes the reputation of the Marlborough, there is also, under the presidency of Count F. Carega di Muricci, the Club Alpino dell' Emilia (or della Romagna), a section of the Italiano whose head-quarters are at Turin.[1] There are two chief news-papers, the *Monitore* and the *Patria*, and a handy Italian guide-book.[2] The shops are tolerable, and the hotels are new, and upon a large scale. The trotting horse has been naturalised; the public commissionnaire is firmly established; and the policeman, has, like his brother of Milan, confessedly borrowed a uniform from the London 'Peeler.' Still, the heart of the city, the great square, is essentially *medio evo*, as when she adopted her famous watchword 'Libertas.' Huge umbrellas, like those manufactured in England for the Court of murderous Dahome, shelter the buxom market-women, the lineal descendants of the Umbrians and the Etrus-

[1] An energetic member, Signor F. Paventi, was kind enough to give me its first publication.

[2] *Guida di Bologna e suoi dintorni del Cav. Michelangelo Gualandi.* Quarta Edizione, interamente rifusa dall' Autore. Bologna: Nicola Zanichelli, 1875.

cans; and King Hensius, after a lapse of five centuries, would find little difficulty in recognising the view from his prison windows. The statue of Neptune (so out of place in an inland city) stands as it stood in A.D. 1564. I would leave it there, although statues in the open air appear somewhat like a tree in a drawing-room; but I would entirely abolish the boys who are dangling dolphins by the tail, and the handsome feminine monsters who are practising a very peculiar operation. If you wish to see the Contadini, go on Saturday morning to the section of the main street laid off by hand-rails; it is a fine, tall, and sturdy race, which still affects the pastrano, or brigand cloak of murret-coloured wool or of mezza-lana (half-cotton), and the furs which some day will be more generally adopted in England.

The result of this intimate blending of the mediæval with the modern soon makes itself felt. There is a something in the presence of Bologna that softens the soul; a venerable aspect appealing to sentiments which men do not wear upon the sleeve; a solemnity of vast half-ruined hall, and of immense deserted arcade; a pathetic vista of unfinished church and closed palace, relics of the

poetical Past which have projected themselves into the prosaic Present. You learn with pleasure that you can lose your way in the long, labyrinthine streets and alleys, wynds and closes—such contrasts with the painful rectangular regularity of Mannheim, New York, and Buenos Ayres. The artistic Greeks laid out straight lines of intersecting thoroughfare; but they had æsthetic reasons for the plan which led to the central temple; and they applied it to their miniature official towns, where the square and ritualistic form, oriented to the four cardinal points, must have compared pleasantly with the large irregular suburbs beyond the walls. We moderns have adopted it and, adapting it to a huge scale, we have produced not a copy but a caricature. Briefly to describe the effect of the aristocratic old city, the 'moral capital of the Emilia,' you have only to remember that of Manchester or of Birmingham, and to conjure up into imagination the clear contrary. The 'centre of trade' may have a poetry of its own, but it is certainly not 'sensuous' as Milton advises; and here we have a mediæval castle dwarfing the mass of bran-new semi-detached villas.

The citizens and peasantry of Bologna are one

of the finest of Italian races, distinguished not only for physique, but by good fighting qualities, by a peculiar vivacity of mind (*sveltezza d' ingenio*) and by a fund of broad humour which is made broader by the 'burr' of their peculiar dialect. Yet within the walls all speak Italian, and the same is the case with the 'contadini,' especially near the Tuscan frontier.

After what we have heard about Papal misrule and want of progress, we might expect at Bologna, which is essentially Roman, a portentous display of ignorance, superstition, and violence. It is only fair to own that the reverse is notably the fact, and that Bologna still justifies her motto 'Libertas.' I can hardly wonder that there are educated men who regret the change to 'Eleutheromania' and 'Italiomania.'

The section called 'Society' is exceptional as the aspect of their home. The effects of the *media* are that universal civility and 'exquisite amenity' which have not been unnoticed by northern travellers. It is, in fact, 'a rare land of courtesy,' an uncorrupted Tuscany. Many families date from the Middle Ages, when the city was ruled by a Governor and forty Senators, *Aristos* who utterly

scouted the idea of a 'Lower house,' and—aristocracy is a rule of honour. Throughout Italy the *richard* is for the most part a thrifty, if not a penurious, personage, who lives hard the wrong way, and who often, like the famous bishop,

Will die from want of what he has.

At Bologna parsimony is the exception. The wealthy nobles keep large establishments; their equipages and liveries would ornament a capital; and they do not dine in secret—a rare circumstance in the 'bel paese.' For their hospitality the Anthropological Congress of 1871 can answer; all who had any claim upon their attention were received with open arms. This is probably due to the fact that Bologna has hitherto escaped the *peine forte et dure* of the foreign colony; only two English families, two French, and a few of Spanish blood appear amongst the sixty or seventy that represent the Upper Ten, and all of them are acquisitions. The same cannot be said of Rome, Florence, and Naples, where, naturally enough, the stranger is excluded till he has passed a long and a somewhat rigid probation. The university at the 'Mater Studiorum,' so famed for Professors of both sexes, still enjoys a green old age; and this society

does not characterise anything beyond and above chaff and chit-chat as *una seccatura*—a 'devilish good word,' said Byron, but the most terrible in the neo-Latin vocabulary. They remember

> The all Etruscan three—
> Dante and Petrarch, and scarce less they
> The Bard of Prose, creative spirit ! he
> Of the Hundred Tales of Love ;

and they do not forget that '*honneur oblige.*' Hence we explain the saying that you are sure of returning to Bologna; and thus we account for the feeling that removal to the nearest thriving port, out of Italy, is a real lapse from grace. These venerable civilisations have their peculiar *cachet*; an aroma like that of wine stored long in the cellar—the flavour is independent of instruction or education, in the limited sense of the words, and, like constitutionalism, it must be a growth, not a graft. Briefly, even the English *bourgeois* begins to realise at Bologna the full sense and significance of 'Northern Barbarian;' and, perhaps, he remembers a fine specimen of the British Philistine, Dr. Johnson.

SECTION II.

OLD BOLOGNA.

BUT Bologna must not seduce us with her modern attractions; we have no time to dwell on the memories of Michelangelo and Francia, the Caraccis and Domenichino, Galvani, Mezzofanti, and Achille Marozzo, the creator of our modern Art of Arms. We come here to inspect the vestiges of a day long gone by, to seek with Thucydides, the history of the people in its sepulchres, to detect under the earth which covers the Etruscan tombs the secrets of their civilisation. The researches which began systematically in 1856 have made study an easy matter. Things have greatly changed since Des-Vergers could write of Pelasgian Spina, Atria, and other Circumpadane cities: 'Elles ont laissé bien peu de traces dans le souvenir des hommes, et les traces sont si légères qu'elles n'ont plus ni forme ni couleur.' Between 1825–7 Zecchi was able to issue his four 8vos., describing the sepulchral

monuments of the cemetery of Bologna, and illustrating them with 152 plates. It is generally believed that the first Etruscan Federation of Twelve Cities was founded, west of the Apennines, on the shores of the Tyrrhenian Sea; and the date is laid about the fourteenth century B.C. The chief witness is the Karnak inscription of the 'Pharaoh' Merien Phtah (Menephtah I.), son and successor of Ramses the Great (II. of nineteenth dynasty), which mentions, amongst the invaders of the Egyptian Delta from the 'regions of the sea, the isles of the sea,' Sicily and Sardinia, the Lycians, and, to quote no other names, the 'Turis'a,' or 'Turscha' (Tursci, Turski, or Tusci),[1] the Greek Thyrsenoi, who occupied Tyrrhenia. After overpopulating the land, they crossed the backbone of

[1] The Eugubine Tables (commented upon by Lepsius), of which five are in Etruscan and two in Latin characters, give, as variants of Tuscus, Tursce, Turscer, Tuscum, and, in the fourth line, Turskum. The Vicomte de Rougé (*Revue Archæo.*, Nouvelle Série, 8th year, August 1867) translates 'Turis'a (Tyrrhenus) cœperat caput belli totius, bellator omnis regionis ejus adduxerat uxorem (et) liberos suos,' and he remarks that, had the Etruscans not failed, 'une colonie Tyrrhénienne eût devancé Alexandre de plus de dix siècles.' Chabas (*Études sur l'Antiq.*, &c., 1872), in a new version of this important inscription, makes the leader not the 'Tursha' (Etruscans), but Marmaion, King of the Lybians, and son of Teit or Deid, who, after the battle on the left of the Nile, escaped to the north, leaving in the hands of the enemy 890 Etruscan hands and 6,369 Lybian trophies. The word 'Raseni' occurs for the first time in *Dion. Hal.*, and thus it is comparatively modern.

the country, and conquered the Aryan Umbrians, whose *mariere* and *terramare* (pile-villages and kitchen-middens)—not to be confounded with the subsequent Etruscan—still remain. These races were familiar with metal-working, and they had succeeded the 'great ocean of Turanians' which that highly-distinguished Mongol scholar, Prof. Paul Hunfalvy, would call 'An-Aryans;' and again these, perhaps, the men of the latest Tertiary or of the earliest Quaternary epoch. In the Circumpadane regions the Etruscan immigrants—dated, by the general voice of history, about the twelfth century B.C.—built their cities and cemeteries, Felsina being the chief centre, and annexed Atria and Spina, the maritime depôts. This theory assumes that the Etruscans all travelled by water and not by land—which, to say the least, is not proven. In the inverse case they would first occupy the eastern and afterwards the western slopes of the Apennines; and thence, emboldened by strength and security, they would overspread the surrounding lowlands, and become pedionomites. But there is nothing to disprove the habit of voyaging and of travelling at the same or at different times; thus, indeed, I would explain the modern theory

of a dozen writers, which derives the Rasenna from the Rhætian Alps, and the existence of the Euganeans, a kindred tribe in the vicinity of Padua. And, in the peculiar fanaticism of the modern Tyrolese, I find direct survival from the 'gens ante omnes alias dedita religionibus.'

The tower-tombs of Palmyra and the rock-tombs of Asia Minor and Syria Proper, where the dead lay buried along the main lines of suburban road, were reproduced by the Etruscans in their new Italian homes. This æsthetic and artistic system of sepulture, which made the monuments true 'monimenta,'—an immense advance upon the days when the corpse was interred, as by modern Africans, in the house; by Moslems near it, and by Christians in the church—was borrowed, with a host of ceremonies and superstitions, by the Romans, as the well-known instance of the Via Appia proves: and yet the old habit survived in the burial of babes that had not cut their teeth under the roof-eaves (*subgrundarium*), like swallows' nests. These groups of sepulchres, which will presently be described, enable a 'hypothetical planimetry' to lay down, with a tolerably sure hand, the lines and limits of Etruscan

Felsina,[1] the colony of Tarchon, the capital of the twelve Federated Cities in the so-called Etruria Nova. Evidently built upon an Umbrian site, and smaller than its Roman successor, it did not extend, as some archæologists have supposed, to the southern hills. The position was the normal isthmus, 'mull,' or peninsula; whose base is the Reno River, a non ignobile flumen, rising in the nearest

[1] The only names which have survived this Federation are Atria (Pelasgic), Spina (Pelasgic), Mantua, Melpum (captured by the Boii), Felsina or Velsina, and, perhaps, we may now add, *Misa*.

Cav. Zannoni, of whom more presently, quotes Manetho: 'Apud enim Tuscos, Pyseo successit Tuscus junior annis xxxix.: huic Aucnus annis xxv., quem secutus est Felsinus annis xxxiii.' Sil. Ital. (*De Bell. Pun.* lib. viii. 601): 'Ocni prisca domus.' Servius *ad Æn.* (x. 198) adds: 'Hunc Ocnum alii Auletis filium, alii fratrem, qui Perusiam condidit referunt: et ne cum fratre contenderet in agro Gallico, Felsinam, quæ nunc Bononia dicitur, condidisse.' Pliny (iii. 19) says: 'Bononia Felsina vocitata.' Sempronius (*De Div. et Chorogr. Italiæ*): 'Flaminea (regio) item a Bononia ad Rubiconem amnem ante a Felsina a principe Hetruriæ missis coloniis Lamonibus.' M. Cato (*De Originibus*): 'Gallia Cispadana, olim Bianora a victore Ocno, postea Felsina dicta usque Ravennam, nunc Gallia Aurelia, Emilia a Romanis ducibus nomen habet. Princeps metropolis Felsina primum a rege Thusco conditur.' Livy has (*Hist.* xxxiii. 37) 'Dein (consules, viz. M. Claudius Marcellus and L. Furius Purpureo) junctis exercitibus primum Boiorum agrum usque ad Felsinam oppidum populantes peragraverunt. Ea urbs, cæteraque castella et Boii fere omnes, præter juventutem, quæ prædandi causa in armis erat (tunc in devias silvas recesserat), in deditionem venerunt' (*U. C.* 556). 'Felsina' then disappears from literature, and the historian (lib. xxxvii. 34) speaks of Bononia as a 'colonia Latina,' established after a Senatus Consult. by the Triumvirs, S. Valerius Flaccus, M. Atilius Seranus and Valerius Tappus.

Apennines about Pistoja, and whose arms are the Áposa affluent to the east, and the Ravóna westward. It was probably walled round, like Etruscan cities generally; the interior was divided into 'insulæ,' or 'regiones,' by main lines of street, each with its own gate or gates; and it is noticed that the most ancient sepulchres are those nearest the defences. Probably a considerable part was of timber. Strabo (v. i. § 7) tells us that Ravenna, a city of the Thessalians, given over by these Pelasgi to the Umbrians, was composed of wooden edifices;[1] and Atria, Hat, or Hatri, which named the Adriatic, preserves, according to the learned Bocchi ('Importanza di Adria la Veneta'), memories of similar constructions, the spoils of the oaks, which in Virgil's day—

> On Padus' bank . . .
> Uprear their heads, and nod their crests sublime.
>
> *Æn.* ix. 680–2.

Atop of the Etruscan city lay Bononia, whose name, revived in Bononia Gessoriacum (Boulogne), has been erroneously derived from the Boii. These barbarians, about B.C. 350, ravaged the Etruscan

[1] The French translators understand ξυλοπαγὴς ὅλη, 'built wholly on piles.'

Federation of the Po, and finally bequeathed a name to Bohemia. The Consular Via Emilia, the Great North-Eastern, probably a successor of the Etruscan highway, traversed the city from west to east, as is proved by the trachytic slabs found some three mètres below the actual level; a metalling brought from the Euganean hills, and still showing the wheel-rut. Bononia, larger than Felsina, was smaller than Bologna, a hexagon, measuring about two miles in circumference; and the Via Emilia still enables us to master the intricacy of the modern city. This thoroughfare corresponded with the Corso, which runs, roughly speaking, between the two halves, northern and southern. Eastward the main street radiates into four branches: the Via Luigi Zamboni (old S. Donato) to the north-east; the Strade S. Vitale, Maggiore, and di S. Stefano, the latter to the south-east; while to the west there are three spokes, the Strade delle Lamme and di S. Felice, and the Via del 'Pradello.'

SECTION III.

PUBLIC COLLECTIONS OF ETRUSCAN ANTIQUITIES AT BOLOGNA.

BEFORE proceeding to the cities and cemeteries of this mysterious Etruscan race, it is advisable to spend a few days amongst the museums of Bologna. The two public are the R. Museo Archeologico dell' Università Bolognese, containing a collection which in 1871 was exhibited in a house further down the street; now it occupies a room in the modern University, the old Palazzo Poggi. Here the most noticeable article is the metal mirror, known from its original owner as the Patera Cospiana, the 'gemma Maffeiana,' which is described as a 'capolavoro di glittica:' hither also the 'Mamolo finds' were transferred. The second—and allow me to remark, *en passant*, that the sooner Bologna combines the two collections, royal and communal, the better—is in the old Archiginnasio, afterwards called the Scuole Pie, from its Charity Schools, and now the Biblioteca del

Comune. The frescoes and inscriptions, the court and galleries, of this venerable edifice, which once rang with every tongue of Europe and the nearer East, are described by all the guide-books ; but none, not even Cav. Gualandi, notice the collections of 1870–1. They are deposited in the Sale (iii. and iv.), inscribed 'Scavi della Certosa,' of the Museo Civico, which lie at the northern end of the grand cloister.

The arrangement is admirable. The walls of Sala No. iii. are hung with large and detailed maps and plans, illustrating the topography of the find, which may be called the 'Certosa Collection.' The merit of the discovery must be assigned to Cav. Antonio Zannoni, 'Capo-Ingegnere Architetto' of the Municipality, who, guided by what seems archæological instinct, began to excavate in 1869. Four hundred tombs were opened in four years. All the skeletons lay supine; only six were irregularly disposed, probably facing their homes—we find the practice noticed in Homer, and the *beatulus* of Persius 'in portam rigidos calces extendit.' All the rest were oriented with their feet towards the rising sun, as the Jews fronted Jerusalem. Thus Laertius tells us that the Greek liturgies ordered the face to look eastwards, and Helianus reports an old law,

which directed the head to be disposed westward: we shall presently learn that this was also an Umbrian custom; and that it was perpetuated by the Romans. A happy thought of Cav. Zannoni was bodily to transport the skeletons, adult and infantine,[1] together with the remnants of coffins (*arcæ*), and even the earth upon which they lay. Except only the *æs rude*, the fee of the 'griesly grim' Ferryman, grasped in the right hand, the funereal adjuncts were placed on the left (north). These are celebes, amphoræ, tazze, and unguentaria of glass or alabaster, in fact, the multiform vases and pots for whose names the curious reader will consult my friend and colleague Mr. Dennis ('Cities and Cemeteries of Western Etruria,' i., xciv., c.); together with candelabra, dice, and pebbles, the latter possibly counters for play. The marriage-ring still clings to the fleshless annular of the left hand: here is the old superstition (Isidore) which made a vein run from it to the heart, and which survives throughout modern Europe. It is often of iron,[2] the servile

[1] They are mostly feminine; seven are adults and five are children.

[2] The iron ring of the 'stern old Romans' is still found amongst the Sikhs; and the strictest Moslems will not wear gold. Whilst the Aryans generally call the 'fourth finger' of the Book of Common Prayer (vulgarly the third finger) 'annularis,' in Illyrian *perstenjak*,

metal amongst the later Romans, who denoted nobility by gold, and the plebeian by silver. The more precious rings were rare at the Certosa. Prof. Calori, 'Della Stirpe che ha populata l'antica necropoli alla Certosa di Bologna' (Bologna: 1873. Plate ix.), a most valuable study kindly given to me by the author, figures two of these skeletons: I shall offer further remarks upon the collection when we visit the spot.

A marking feature of this admirable *trouvaille* is the number of *ciste in bronze a cordoni*; we have here fourteen, whereas in 1871 Etruria Circumpadana had yielded only seven ('Lettera dell' Ing. Ant. Zannoni al Sig. Conte Comm. Gian Carlo Conestabile.' Torino: Stamperia Reale, Oct. 15th, 1873). All are of the same age, and undoubtedly denote a splendid epoch. The cylinders are two plates of thin bronze, flat bands alternating with cords repoussé-worked. The cover is often a flat stone, and the lower band is sometimes ornamented with leaves; the horizontal rings num-

the Turanians, according to my learned friend Prof. Hunfalvy, of Pesth, term it the 'finger without a name.' This is found in Chinese (Works of Mencius), in Japanese, and in the Dravidian tongues; for instance, in Tamil, Telugu, and Canarese, it appears as *anámika*, 'anonymous,' from the Sanskrit, *náma*. The 'philological puzzle' was lately discussed in the columns of the *Pall Mall*.

ber fourteen or fifteen, and the bottom is also composed of concentric circles. Feet are present in some specimens, absent in others. The total height averages 0·33 mètre (=1 foot 0·99 inch), and the diameter 0·29 mètre (=11·42 inches) to 0·40 mètre (=1 foot 3·75 inches). The ornaments are mostly leaf-like borderings, near the upper edge;

BRONZE CISTA, WITH STONE COVER.

winged masks at the junction of the *ansæ*; and, on each of the three feet, appears in one specimen, a satyr, demi-couchant, and holding a wine-skin and a cup.

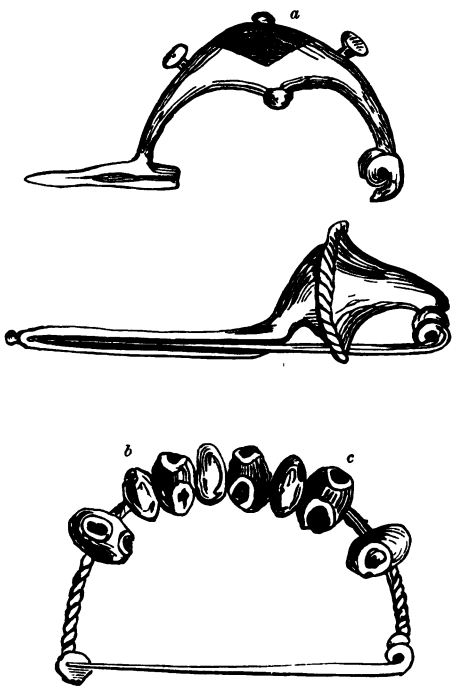
These artistic articles followed the rude big-bellied urn of terra cotta, which contained the ashes

of the dead,[1] even as the earthen tazza became the bronze cup. It has been suggested that during the owner's life they served for *pixides* or dressing-cases; and this is supported by the presence of the *ansæ*, which in one specimen represent a bull and a ram. The cysts of Middle Etruria, and especially those of Præneste, were buried as ornaments: they contained articles of toilette, sponges, unguentaria and unguents, the little rouge-box, the white ceruse, &c. The Bolognese cysts are said to have been the produce of local art and industry; yet a precisely similar article, with handles and without feet, was found at Granholz, near Bern, and is exhibited at the Stadt Bibliotek of the Swiss capital. MM. Cavedoni and Gozzadini infer from their simplicity that they are more ancient than those of the Central Federation and of Latium, which cannot date beyond the first half of the third century B.C.: the same may be said of the bronze disks which served as mirrors. I would further notice the resemblance of shape with the *kilindi* or bark cylinder, in which the Mnyamwezi stores and transports his valuables.

Another characteristic of this collection is the

[1] At the Certosa at least one cyst was found not to contain human bones.

huge and highly ornamented *stela* or *cippus*, the prototype of the humble headstone in the churchyards of our villages: perhaps, also, the *meta*, or goal-



FIBULÆ FROM VILLANOVA (all half size).

a, *Fibula* with amber in setting. *b*, Amber beads. *c*, Glass beads, blue ground, yellow enamel.

The bronze of these *fibulæ* showed—

Copper	84·26
Tin	15·74
	100·00

like shape, symbolised the end of man's *exiguum curriculum*. From the learned studies of the late

Count Giovanni da Schio, of Vicenza ('Sulle Iscrizioni ed altri monumenti Reto-Euganei.' Padova: Angelo Sicca, 1853), of which I owe a copy to the courtesy of his two sons, Counts Almerico and Alvise, we learn that the Euganeans used the obelisk-shaped gravestone, whose legend usually began with Ειχο (*hic, heic* ?). Thirty tombstones were found, a monumental series unique in size and ornamentation; and the largest and most remarkable of these products of national art is thus described by Count G. C. Conestabile ('Congrès,' p. 271): 'The height, not including the base is about 2·10 mètres (=6 feet 10·68 inches); the breadth 1·26 mètre (=4 feet 1·60 inch) and the thickness 0·30 mètre (=11·81 inches). The bas-reliefs, raised hardly half-a-centimètre (=0·197 inch), are divided into four compartments to the front and three behind. Beginning at the top, a hippocampus faces a Nereid holding a fish: in the second zone the defunct, umbrella in hand, rides a biga behind the auriga; a winged figure soars above him, and before the horses marches a helmeted form, mantled about the reins, with a torch in the right and a rudder (oar) in the left hand. The third band contains two pugilists, separated by a little tibicen, and flanked by the

agonothetes (director of games), and a youth; the latter holds an unguentarium and another utensil for the comfort of the combatants. In the lowest compartment a throned figure is approached by a personage accompanying a car, and by others with a basket and various offerings—apparently it is the Infernal Deity receiving the defunct and his suite. The reverse contains fewer figures: a feminine body, ending in a double serpent's tail, hurls a rock; a charioteer urges his biga at speed, and in the lowest a warrior, with lance and shield, faces a cloaked form. These designs are separated, and mixed with ornaments of leaves, ivy stems, and waving lines.'

Count Conestabile, who would distribute the dates of the several kinds of *stelæ* between the third and the fifth or even the sixth century of Rome, followed by Cav. Zannoni (*loc. cit.* p. 27), proposes a four-fold division of the thirty tomb-stones.

1. Rough water-rolled natural blocks, still found in the Reno bed; menisci, lenticular, cylindrical, ovoid, or spheroidal. The diameter ranges to 0·77 mètre (=30·35 inches).

2. Long-ovoid and cylindrical stelæ, with plain faces, and sides converging below like termini, artificially smoothed and flattened; in fact, the

menisci civilised. The bases were left, as usual, unworked for planting in the ground, and one shows the letters IAN or NAI.

3. The sculptured stela of the same shape, but especially the horse-shoe. Of these splendid specimens the tallest is 1·45 mètre (=4 feet 9·08 inches) by 0·80 (=2 feet 7·50 inches) broad; a segment of a circle above, with the sides inclining inwards or descending vertically. It is carved on one, perhaps on both faces; and here and there it preserves traces of red paint, with which, possibly, the name was inscribed (M. Hirschfeld). The vine and the ivy, both sacred to Bacchus,[1] meander over the perimeter, enclosing, as has been shown, a variety of figures; and certainly the most remarkable, when we remember how lately the umbrella found its way into England, are the personages holding it with the right hand—a frequent rilievo amongst Etruscans. The others, still representing funereal usages, are a panoplied warrior, with lance at rest; a battle-scene between a horseman

[1] Hence the Latin saw: 'Vino vendibili suspensa hedera non opus est' ('Good wine needs no bush'); and the ivy-tuft still hangs over the Œnopolium and the Thermopolium of Istria. It is not difficult to detect the origin of the practice in the beauty of the plant upon the borders of the Mediterranean: the rich purple clusters exactly resemble the currant-grape of the Peloponnesus, and the perfume of the finely-veined leaf is still supposed to dissipate the fumes of wine.

and a footman ; a feminine face and bust ending, not in a fish, but in a double snake ; the winged Genius, with a serpent in either hand ; the biga and triga ; horse-races, and chariot-races ; the barded steed ; the altar and basket ; the bark (Baris ?), with mast and sail ; Charon, holding the oar in the left hand ; sports with balls and lances ; the star ; the funereal owl, the hippocampus, also a favourite ; the olive, the myrtle, and the pomegranate ; and various other herbs, flowers, lotus (?), and fruits. The signs of archaism are the shallowness of relief ; heavy proportions ; angular movements in the figures ; imperfect forms, and indistinctness of details. In later times the sculptor's hand became freer, his tool worked with greater breadth, vivacity, and truth ; and, finally, he arrived at individualism.

4. Spheres and spheroid stones, worked and prolonged in the rough where the parallelopipedon base was intended for planting in the ground—a form very rare in Etruria Proper, the central region between the Campanian and the Circumpadan. Two globes of remarkable size are in this museum ; perhaps they symbolised the head, neck, and shoulders which lay below. A smaller ball, carved with a little figure, was unearthed, as will after-

wards appear, at Marzabotto; and another, cut only on one side, was taken from the Torricelli tombs.

The articles of pottery, not including fragments, reach the goodly total of 810. These interesting remains of home life were found with the skeletons, as well as with the ashes, and they are divided by Cav. Zannoni into four kinds :—

1. The rude brown, black, and ash-coloured, numbering 200.

2. The plain red (160).

3. The plain varnished black (150).

4. The painted and figured (300).

The latter again are either red figures on black fields with violet accessories, or black on red with violet and white, for flesh and tools. The former belonged generally to the tombs, the latter to the pyres. More than 50 bear inscribed marks. The collector's chief enemy, both in pottery and in bronze, is the general custom of breaking, sometimes with great violence, the objects which accompany the defunct: thus the ghost or 'material soul' of a man ate the Manitou, spirit or ghost of food, out of the phantasm or ghost of a pot. So Propertius (iv. 7, 33) :—

> Hoc etiam grave erat, nulla mercede hyacinthum
> Injicere, et fracto busta piare cado.

Amongst modern Fetishists it is not held loyal to take anything from the person of the dead, and some advanced tribes, such as the people of the Old Calabar River, allow houses, canoes, furniture, weapons, boxes, and moveable wealth to fall to pieces; whilst others break them up and form a kind of monument. It is here easy to see the connection with sacrifice, human and bestial.

Specimens of the *æs signatum* were also found. According to Pliny (xxxiii. 13) it was used in the days of Servius Tullus—king or dynasty—but we know from him (xxxiv. 13) that Numa had instituted *ærarii*, or coppersmiths. The *æs rude*, whose funereo-religious use continued to Imperial ages, has four several shapes[1] at Villanova, the Certosa, and Marzabotto; and these, again, vary not only in the amount of alloy, but in the nature of the metal. Some have tin and zinc with lead; others only the last.

1. The rude inform or scoriform mass, ash-coloured, and friable under the hammer, has 96·592 per cent. of copper; lead, 2·142; and the rest is impure matter without zinc or tin.

[1] The *æs grave* appeared only in the fourth century of Rome.

2. The cylindrical or virgated, with longitudinal striæ, 91·77; tin, 8·22; of lead a trace, and no zinc.

3. The flat, or laminated like the fragment of an ingot, has only 80·679; lead, 17·886; and tin, 1·435.

4. The discoid, more or less ovoidal, possibly the *oboles* of Plutarch (*Vit. Numæ*), whence came the *obolus*. One disk (diam. 0·03 mètre = 1·18 inch) engraved with three parallel lines, may be an *æs signatum* (?).

The following is the late Prof. Sgarzi's analysis of the *æs rude* of Villanova (1), and of the *stips votiva* of Vicarello (2), compared with the *æs rude* of Marzabotto (3) (Prof. Missaglia):—

1.			2.		
Copper	93·70	100·00	Copper	95·20	100·00
Tin	06·30		Tin	04·80	

3.		
Copper	64·40 and 54·61	= 100·00
Lead	32·53 „ 38·00	
Accidental elements (trace)		

It will be seen that the bronze of Vicarello is the ruder material, and probably more ancient, as it contains the smallest quantity of alloy. Lead and tin in increased proportions appear at the Certosa, and even more at Marzabotto. That of Vicarello has the zinc alloy of the Romans. And, whilst all the

reputed bronzes found outside Italy, as the vase in the museum of Bern, contain lead, here in some it is present, and absent from others. Cav. Zannoni (p. 46) suggests that the shapes are not accidental, but arbitrary, to show the different monetary value, which would vary with the quantity and the quality of alloy.

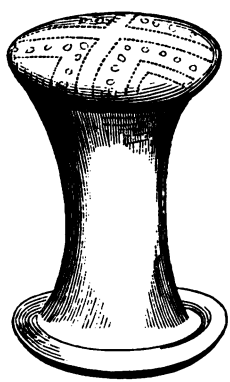
The industry of the stone age is represented by arrow-heads (elf-shots), axes (*coins de foudre*);[1] knives or scrapers, flakes artificially struck from the core; fictile disks in great numbers—some of the latter may have been used for the dress weights, which will presently be described. In this part of the collection there is nothing to notice. The bronze weapons are fragments of a large round *clypeus*, with gilt and engraved handle; a *galea*; three knives, like those of Caserta and Matray in Rhætia,[2]

[1] These *glossopetræ* or *betuli*, the *ceraunicæ similes securibus* of Pliny; the *ceraunicæ gemmæ* of other writers, are so called in the Channel Islands and elsewhere. The Calabrese believe that these *cuogni di truoni* are the bolt itself (*ceraunites*, not *arma heroum*): they strike 18 canne (each 2·21 mètres) deep, and they mount 1 canna per annum, when they reach the surface, and form most valuable talismans against thunder. They are proved by being hung over the fire with a blue thread, which must not burn. With this boorish superstition the axe of the savage has been worn on the warrior's helm and on the royal diadem.

[2] At Matray, also written Matrai, a village on the northern slope of the Brenner Mountain in the Tyrol, was found in 1845 the part of

whence Frèret and Heyne, Niebuhr, and Mommsen would derive the original Etruscans; one small and two long narrow *cuspides* (lance-heads); a long, heavy iron cutter, found in the grasp of a young and vigorous male skeleton, bore signs of a wooden scabbard, showing that the Etruscans were wiser in this matter than we are.

Amongst the unexplained articles are cylinders, shaped like dumb-bells, but ending in *menisci*, not in



THE 'DUMB-BELLS.'

spheres, made of fine black clay, about o m. 8 cent. (=2·75 inches long), oftener plain, and sometimes

a procession in relief, illustrated by the late Count Giovanni da Schio, to which allusion will presently be made. The rude art is held to confirm the testimony of Livy (v. 33), of Pliny (iii. 24), and of Justin (xx. 5), that Rhætia was conquered by and occupied by the Etruscans when driven by the Gauls from their Padan settlements. Evidently it may prove the reverse, and an emigration from north to south is more credible than a movement *vice versâ*.

ornamented at both ends with five circles and the mystic die. Of these as many as twenty, all unbroken, were found in the wealthiest tombs; and Villanova yielded seventy-four. The 'Grotto of Isis' (necropolis of Volci) has supplied similar articles; and Visconti figures (Mus. P. Cl. ii. pl. 17, 18) what appear to be the same things in the hands of two Egyptian statues. He suggests, first, that they were emblems of the Agathodæmon; secondly, that they were *phalli*. Others suppose them to have been used in worshipping the Lampsacan god, and they offer a superficial resemblance to certain emblems well known in India. They are always found in pairs, but no use for them has yet been defined. In the Isis-grotto of Vulci, however, we see similar shapes used by men jumping; and the second table of Count Schio's learned study represents two nude pugilists contending with (leaden?) *halteres* or *alteres*[1] in their hands. I reminded Count Gozzadini of his cousin's publication. He replied, however, that the resemblance could not be accepted, as many of the clay cylinders were only 3 centimètres (= 1·18 inch) long. But, these *simulacra* might, as was the custom with the human figure, with weapons,

[1] Quid pereunt stulto fortes altere lacerti? (Martial, xiv. 44).

and with other articles, have been reduced imitations for the purpose of sepulture. The Lilliputian agricultural implements of bronze in Sardinia, to mention no other place, are supposed to be symbols or religious emblems (*Congrès*, p. 27).

Bronzes are numerous in the Archiginnasio; but of the 13 mirrors, of which one is white metal, none are inscribed or figured. Besides *situlæ*, there are œnochoes (12), cullenders (11), simpuli (20), and candelabra (30): many show the forms familiar to the peasant's cottage in the present day. Some of the iron coffin-rails have bronze heads, like those found at Salona. Professors Pucinotti and Casali detected little zinc in bits of fused and worked bronze of a candelabrum from Villanova (No. 1), the Certosa (2), and Marzabotto (3):—

	1.		2.	
Copper	91·11		86·45	
Tin	08·77	= 99·88	Lead 6·85	= 100·00
Iron, trace			Tin 6·70	
Zinc, „				

	3.	
Copper	95·93	
Tin	04·07	= 100·00
Iron, trace		

The beaten bronze from Villanova (1), the Certosa (2), and Marzabotto (3), gave the following results:—

	1.		2.	
Copper	94·4		83·754	
Tin	05·0	= 99·4	16·246	= 100·00
Iron, trace				
Zinc, „				

	3.	
Copper	91·32	
Tin	08·68	= 100·00
Zinc, trace		

The bone dice were numerous and of two kinds, cubes (κύβος) and oblongs, the latter bearing the 'canis,' (κύων) or 'canicula,' the Greek Μονὰς or Ἕνη (*unio*), and one ace at one short end, and the deuce at the other.[1] In both the concentric circlets varied from one to three, and were coloured red or blue. The disposition of the 'pips' also completely distinguishes them from the Roman dice, according to Cav. Zannoni, who has forwarded his description to the eminent Etruscologue, Prof. Ariodante Fabretti, for publication in the continuation of his great work. Thus the correspondence from Twickenham, concerning

[1] Lord Crawford (*Athenæum*, April 11, 1874) remembering the 'damnosa canicula,' and the 'damnati canes'—the damned dogs—of the poets, hence derives the 'dog-luck of our modern slang speech.' This is going deep for a proverbial saying which lies on the surface. We might as well refer 'son of a doggess' to the offspring of Hecuba. And if *unio*, the ace, is so condemned, how can we believe it to represent Sirius, the Canicula, sacred to Mercury or Hermes, the god of good luck?

the scheme of the marks, which appeared in the 'Athenæum' (July 1874), is, to speak mildly, premature, and the 'hypothesis' about Sig. Campanari uncalled for. I expect great things from a scientific illustration of these 'Lydian implements.'

One of the *situlæ* contained a light ligneous matter, very porous and friable. Treated by Prof. Adolfo Casali, it proved insoluble in water; concentrated alcohol dissolved about one-sixth, and the dissolution strongly troubled water, which left when evaporated an orange-black sediment. The latter, exposed to fire, burnt with a fuliginous flame—briefly, it appeared to a mixture of olibanum and storax, serving like the incense still used in our churches.

The amount of toilette articles was immense in variety, if not in number; of bronze *fibulæ* 200 articles, of silver 120 (two large and fine), and of gold 2. They are, as usual, complicated and multiform, and three had enamelled glass beads on the needle. There were 150 bronze buttons; 10 *armillæ;* huge pins for the use of the ornatrix (*coiffeuse*); 7 gold rings; 10 silver, and 3 iron; with sundry of paste, bone, and amber. The *pendeloques* are 20 of glass, mostly enamelled, and

50 of brown pottery. The earrings are of amber, iron, silver, and gold (7 pairs and 3 odd of the latter): some weigh four-tenths of an ounce (13 grammes = 200·60 grains). The minute balls of gold, which the Etruscans soldered with a marvellous art, the elegant filigrane and granulated work, are the despair even of the famous Castellani. One is a serpent biting its own tail, and another a leonine head. The *pixis* or dressing-case, rivetted with plates of bone, stands on four feet, and contains little cylinders of the same material. The *aryballa* (perfume-holders) and *unguentaria* of pottery, alabaster, and glass, coloured and enamelled, still contain rouge, which analysis proves to be colcothar or *crocus martis* (oxide of iron), locally called *rosso Inglese* or *rossetto di Parigi.* The mirrors, all plain, number 13, including one of white metal, probably copper and tin; the front disk is slightly concave, and none are of stone: 12 others are of bronze. The necklaces are chiefly of glass, and of amber, concerning which long discussions took place at the Congress of Bologna. The general opinion was that this semi-mineralized gum came from the Baltic, and denoted an ancient connection with the Phœnicians. One necklace had,

by way
a ch

used, even
makes thunder and

The gem of the collecti
(Sala No. iii.), which con
and fragments of tis
below, about a foo
mètres (=1 foot o
of 0·29 (= 12·4
(= 5·12 inches
of subjects, t
vellous exec
The bas-
ing the
zones,
of th
and t
in a fea

The first, or highest, zone shows
sion. Two horsemen and thirteen footmen, all with couched lances, marching from right to left; their shields are four oval, five long-oval, and the rest

Œcumenical Council in their canoes; this part of the composition ends with a big dog.

The third zone, which resumes the direction of the first, displays the agricultural pursuits preceding the preparations for the feast: a calf carried on the shoulders of two slaves; a pig drawn by a third, and others following. In the centre of the groups, acting the *point de mire*, appears the idea which inspires the whole. At one end of a couch (*biclinium* or *anaclynteris*), whose arms are adorned with griffins' heads, sits a lyre-player, at the other a performer on the syrinx, each backed by a small boy in the nude. They wear the huge *pileus* before alluded to; and between them hangs another *situla*. Rural episodes on the right—hare-hunting and bird-netting with the *varra*, and on the left a peasant carrying his primitive plough and driving his steers, finish both ends of this third zone. Finally, the fourth or lowest is filled with fantastic animals—five-winged chimæras, two quadrupeds, a stag, and so forth.

'It would be impossible,' says Professor Count J. Conestabile,[1] whose account differs in many points

[1] Cav. Zannoni also looks upon it as representing not a funeral but a procession; a 'Laudesis' (Dionysius, ii., p. 129); a Panathenæum

from that of Cav. Zannoni (*Scavi della Certosa*, page 12)[1] 'to describe the multitudinous details of the figures and articles upon this admirable composition; the marvellous care; the finesse of execution in the ornamentation of the armour, the tunics, and the mantles; and the minute exactness with which the costumes are represented. Whilst the animals are admirably drawn, the human beings show, in the highest degree, an archaic, or rather, artistically speaking, an infantine, type, in the prognathism, the puffy cheeks, and the general stiffness of the movements; in the profiled position; in the arrangement of the dress, and in the absence of distinction between the latter and the forms which it covers. If this archaism be really what it appears, original and

(Aristoph. *Nub.* v. 984), a Saltatio (Livy, i. xx), or an Armilustrum (Plaut. *Pseud.* iii. 112).

[1] '"Sur les Découvertes de la Certosa de Bologne" (pp. 272–274) in the *Compte Rendu* of the Congrès Internationale à Bologne, 1821.' The valuable volume printed by Fava and Garagnani at Bologna, 1873, is now not to be bought there. I owe my copy to the kindness of my excellent friend Prof. Gian Giuseppe Cavaliere Bianconi, of Bologna, whose name in the world of letters is so well known. He was kind enough to give me copies of his three studies (Bologna, 1862, 1868, 1874) on Marco Polo and the Rukh-bird (*Degli Scritti di Marco Polo e dell' Uccello Ruc*, &c.), which supply much interesting matter concerning the original edition of the great traveller. In his memoir entitled *Esperienze intorno alla Flessibilità del Ghiaccio* (Bologna, 1871), he proves by the experiment that the flexibility of ice, as supported by Forbes, and its torsionability, do not depend upon 'regelation.'

SECTION IV.

PRIVATE COLLECTIONS, ESPECIALLY THE VILLANOVA.

THE Aria family, who will be noticed at Marzabotto, have collected for two generations the Etruscan antiquities found upon their property. But the most interesting, not only for its antiquity, but also because it has been described with so much learning and detail,[1] is from Villanova, the property of Count Gozzadini. The village lies 'about eight kilomètres E.S.E. of Bologna,' in the parish of Santa Maria di Casella, upon the banks of the Idice fiumara, of old a favourite site for tombs. The place, a mere 'métairie,' was long known to the peasantry as the

[1] The first essay is entitled *Di un Sepolcreto Etrusco scoperto presso Bologna*, &c. (Bologna, Soc. tip. Bologn. 1855—a quarto with 8 plates). The second is a quarto with one plate: *Intorno ad altre settantuna tombe*, &c. (Bologna, tip. all' Ancora, 1856); and the last is *La Nécropole de Villanova* (Bologna: Fava et Garagnani, 1870). This learned volume was given to me by the author, and I owe the copies of its illustrations to the kindness of Mr. Micklewright, of Trieste. The conversion of mètres into English figures is the work of Mr. E. W. Brocks, British Vice-Consul, Trieste.

'Camposanto,' from the large bronze rings turned up by their ploughs. Circumstances, which will presently be alluded to, induce me to hold that the so-called cemetery was part of a town, but there are now no means of discussing the question—indeed, in these days the stranger will not visit the site, all the diggings having been filled up. On the other hand, the Count's cabinet is admirably arranged; and this unique collection, which may date from more than 3,000 years ago, is hospitably shown to the traveller. The first find, a 'pot' full of bones and ashes, was in May 1853, and works were carried on regularly for two years, carefully superintended by the owner, *aidé*, as he says, by the Countess.

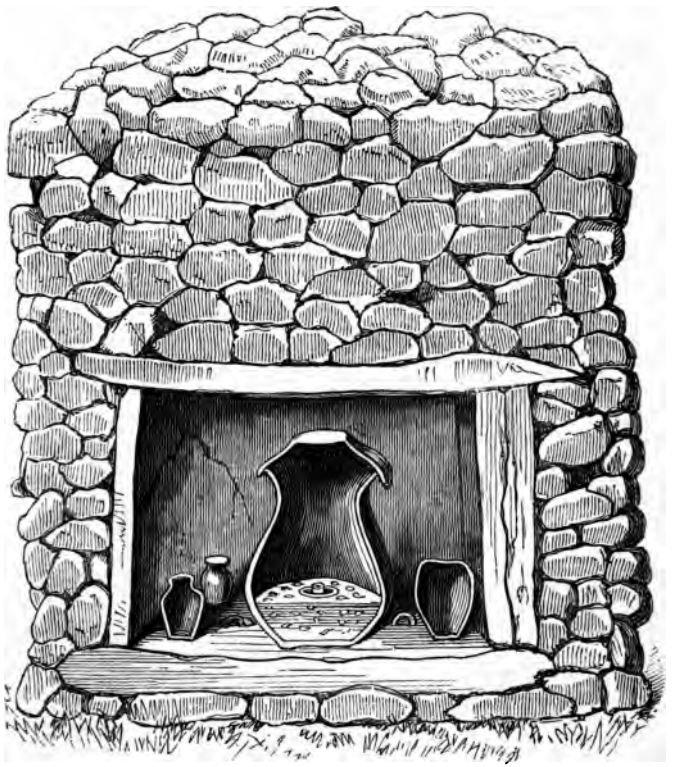
The area of excavation was an oblong, 74 mètres east and west (= 242·9 ft.), by 27 (= 38·7 ft.) north and south; or 1,998 square mètres (= 21,507 sq. ft.). Of the tombs, some had been destroyed by the ditch-diggers, but a total of 193 were found unopened, in the same state as left after the 'æternum vale!' Six, of the same material as, but of different and finer form than, the rest, and separated, as if for the dignity of a higher race, by a clear space, yielded pecu-

liar articles, conjectured to denote an especial caste. The others were divided from one another by little more than a mètre, but on the western edge, and circling towards the south, this interval increased and distances became irregular. Here was found a conical stone, about one foot broad at the base and nearly two feet high, rising above the tombs: possibly, it represented the Termes which consecrated the limits. The depth varied from 0·30 mètre (=11·81 inches) to 1·40 mètre (=4 ft. 7 inches) below the actual surface. Fourteen skeletons, with crania mostly brachycephalic, lay at length supine; with the feet turned eastward; with the hands crossed over the pelvis after the fashion of the ancient Egyptians, and, as usual, with all the funereal objects disposed on the left side, except the coin, which was grasped in the right hand. Some few were bent, like the mummies of Peru and the Brazil. The sepulchres represent four distinct shapes, in the following proportions:—

1.	Those built with pebbles and kistvaens (slabs of grit) .	28
2.	„ „ pebbles only	21
3.	„ „ kistvaens only	21
4.	„ without kistvaens or pebbles . . .	123
	Total	193

On the walls of the collection-apartment are

drawings and illustrations of the first and most interesting class of tombs, nearly of the natural size. The following is a reduction.



PEBBLE-TOMBS AT VILLANOVA.

They were originally subtumular or subterranean, like all the sepulchres of the primitive Italians: the idea of sinking the sepulchre probably was that the dead polluted the face of earth, sun, and air, and should be relegated to the hypogæa

belonging to the infernal gods and *manes*. The barrow, which consisted of the soil thrown up in excavation, showed, on removal, rough slabs of pliocene grit or sandstone from the Apennines, overlying and projecting beyond the cylinders or quasi-cylinders of water-rolled stones, built wholly without mortar. Four were parallelograms of similar pebbles, measuring 2·69 mètres (=8 feet 10 inches) each way; the walls rose perpendicularly to 1·40 mètre (=4 feet 7 inches); and the top was not horizontal, but sloped obliquely, with a depression of 0·76 mètre (= 2 feet 6 inches) to a central line of pebbles; they also contained many bronzes and broken pottery. The cylinders varied in height from 0·76 mètre to 1·50 mètre (= 4 feet 11 inches); the maximum diameter was 1·42 mètre (= 4 feet 8 inches); and the lateral walls, composed of either single or double strata of pebbles, averaged a mètre. In some of them the funereal objects were stored without separation, others contained quadrangular kistvaens of six unworked slabs, four uprights, covered by a lid slightly concave at the top, and projecting on all sides. The flooring was either a flag or pebbles. The kistvaen also existed without the pebbles. Finally, of 193 in this *sepolcreto*, 179

contained cremated, mixed up with 14 intact, skeletons. This proportion (100 : 7·82) is rather Greek than Roman, and we find the system modified at the Certosa and the Marzabotto cemeteries. The former, out of 365, show 115 of adustion to 250 of inhumation (46 pyres to 100 tombs); and at the latter, again, the cremated were in excess. Here, then, we have a knotty point for study. Prof. Conestabile ('Revue Arch.,' October 1874, p. 253) makes the prehistoric peoples of Italy during the bronze age favour cremation, not only for hygienic purposes, but as a kind of sacrifice, and the Etruscans, during their national existence, to prefer inhumation. De Jorio, an experienced excavator ('Metodo per rinvenire e frugare i sepolcri,' etc., p. 154), tells us that the Hellenes of Magna Græcia burnt ten for one inhumed, and the Romans buried nine to one burnt. This, however, is a subject which begins with Homer, and its intricacy forbids all discussion.

Inside of each kistvaen was found one large single-handed *urna*, *cinerarium*, or *ossuarium* (ὀστοθήκη or ὀστοδοχεῖον); some few bore signs of a second handle, which had been removed. I cannot but regard this almost universal custom of confining the dead to ceramic vases as an attempt to restore them

to the womb. All save three had the same shape, probably characteristic of, and made purposely for, the tomb; mostly they were black, and they varied in ornament and dimensions. The position ranged between vertical (67), quite horizontal (44), and inclined at an angle of 45° (17); this was intentional, as pebbles were placed for supports. They contained nothing but bones, veritable 'relics;' whereas the Romans and other races stored both bones and ashes in the *urna*. The remains, which were not quite calcined, showing that the furnace had consumed about two-thirds of the skeleton, formed a thin layer of some four inches. They were chiefly carbonised skull-bones, fragments of vertebræ, diaphyses of the longer limbs, and but few teeth; although Pliny (N. H. vii. 15) assures us that these bones are the only part of the body which resist the action of fire, and are not consumed with the rest. As animal victims were also thrown upon the pyre, a bit of equine rib was found in one ossuary. Each receptacle was covered with a concavo-convex clay disk, or with a large, deep, single-handled cup, not purposely made. These lids appeared to be *tazze* and *paterœ*, possibly used for funereal libations, and for the aspersions of wine with

which the pyre-embers were extinguished.[1] The urns were planted about 0·10 mètre (= 4 inches) in the *nigra favilla*, a stratum of ashes which averaged 0·95 mètre (= 3 feet 1 inch); it yielded no large fragments of charcoal, and only a few bone-splints which had escaped the pious 'ossilegium.' Here were gathered the 'munera' offered to the ghost; bronze and iron, glass and amber, bone and clay; together with the remnants of the grave-clothes; of the rent raiment of friends, and bones of various beasts, the offals of the *silicernium*, which the Romans called *obba*. The shells of two eggs[2] were found; one near the ossuary, the other in a cup. Each receptacle was always girt by accessory pots, possibly those used at the supper. In the kistvaens they rarely exceeded eight; but they were more

[1] Virgil says (*Æn.* vi. 227): 'Relliquias vino et bibulam lavere favillam,' and Numa forbade wine to be used where water would suffice. The relations, after circumambulating the pyre with naked feet and ungirt waists, extinguished the fire, and the women nearest of kin gathered the bones bit by bit, sprinkled them with milk, wine, and balm, shook them in a linen cloth, and stored them in the ossuary.

[2] Count Gozzadini quotes :—

'Sed tibi dimidio constrictus cammarus ovo
Ponitur, exiguâ feralis cœna patellâ.'—*Juv.* v. 84.
'——nisi centum lustraverit ovis.'—*Ibid.* vi. 517.

and *Ovid* (*Ars. Am.* ii. 329) :—

'Et veniat, quæ lustret anus lectumque, locumque :
Præferat et tremula sulphur et ova manu.'

numerous in those tombs which were composed of pebbles and of earth. The richest showed a circular heap of pottery, about 0·38 mètre (= 1 foot 3 inches) high, by 1·50 mètre (= 4 feet 11 inches) broad, and some numbering forty distinguishable items. They had been 'entassés comme dans un panier,' as Jorio said of the Magna Græcian sepulchres (p. 154).

Of the ceramic remains at Villanova, Count Gozzadini ('Di un Sepolcreto,' etc., tables ii. iii. and iv.) gives 65 various designs, some of them wheel-worked, and not a few elegantly turned, but all wanting paint, and confirming the theory that the Grecian art, imported with artificers by Demaratus of Corinth,[1] was with the Etruscans an affair of imitation. The two great divisions are the black and the red; but it is still doubtful whether the former arises from the quality of the clay or from the burning-process. The inside shows a paler line of natural colour, and the fragments heated in the furnace become ruddy. On the other hand, the

[1] *Circa* B.C. 657. The well-known painted jars are most common in Central Etruria, especially to the maritime cities and certain important points like Clusium (Chiusi), where they were first imported. Neither the port of Adria nor the land-route supplied the Eastern Federation till a comparatively late day.

red pottery contains a central black diaphragm, also unexplained; it is limited on either side by lines of brick-colour with a smaller diameter.

The late Professor Sgarzi thus analysed specimens of the Villanova pottery ('Boll. d. corr. arch.,' 1837, p. 30):

—	Black figured Ossuary.	Red figured Ossuary.	Fine little black Tazza.	Fine little red Tazza.
Silex	52	44	50	48
Alum	20	18	16	22
Lime	02	01	01	01
Iron oxide	12	24	20	18
Azotised organic matter	02	01	03	03
Water	10	09	09	06
Loss	02	03	01	02
Totals	100·00	100·00	100·00	100·00

Count Gozzadini, aided in this *casse-tête* by the ingenuity of his wife, pieced together the crushed fragments of funereal potteries, and found them to be of the same form with three exceptions, namely, red, unornamented dolia, surmounted by three protuberances about 34 centimètres (= 1 foot 1 inch) high, and apparently serving as *ansæ*. Of a hundred only three had double handles, contrary to the custom of the Greeks; consequently, we should be careful in applying to them Hellenic names. Another

curious form, previously found only in the Albano necropolis, is the double cone joined at the base —of this more presently. The children's ossuaries averaged 19 centimètres (= 7·48 inches); the adults' 39 centimètres (= 1 foot 3 inches). They are mostly black, though a few are red; the *ansæ* are of many and various shapes—semi-elliptic, twisted, rectilinear, and undulated. The surface is either plain or adorned; the characteristics are hollow impressions (*graffiti*) upon soft paste, by a tool with three, four, or even five equidistant points, raised in cameo, and thus making parallel lines.

DOUBLE CUP.
Here the instrument has been turned to make the different meanders.

Other common decorations are simple and double pyramids and meanders, single, coupled, or interlaced. The most general are lines of disks, different in dimensions, with three concentric circles like some of the dice; then come dotted pyramidal and serpentine lines of peculiar shape; the latter, which are also found on bronzes, may denote the Genius of the Dead, or be emblems of mortality; whilst ducks and geese, living in air, in water, and on earth, show the several abodes of

the phantasm or ghost, which we will not call a spirit or a soul. Some have nude, archaic mannikins, disposed in lines round the vases; they are drawn as children draw, with big oval heads, double lines for bodies, and single lines for limbs—perhaps they represent the *manes* who watch over the sepulchre; and the same may be said of the serpents. The accessories of the ossuaries are mostly *paterœ* and *tazze*, the five double cups before figured, shaped like dice-boxes with the central diaphragm, standing 22 centimètres (= 8·66 inches) high, and with an interior diameter of 16 centimètres (= 6·30 inches): perhaps they represent the δέπας ἀμφικύπελλον or the δικύπελλον of Homer (Il. vi. 220), and of Aristotle ('De Hist. Animal.' ix. 40). A frequent ornament is the double line of crosses, some contained in circles: a subject treated by the learned Gabrielle de Mortillet, in 'Le Signe de la Croix avant le Christianisme,' ch. 2. Finally, three ossuaries and one black *patera* (*Numæ nigrum catinum*) have each a meander, not engraved, but made by a white band of superimposed paste unhardened in the fire. This, perhaps, is an approach to painting.

The so-called clay spindles found at Villanova

number 169, and of these only 3 bear makers' marks.[1] As 7 were yielded by a single tomb, and an accessory vase contained 12, Count Gozzadini suggests that they were the *glandulæ* attached to the robe, intended to preserve the graceful form; for instance, in the pallium of Jupiter, the tunic of Minerva, the chlamys of the Augustan *lares*, and the peplum of Hope and of the tragedian. He assigns the same office to 24 bronze globes and spheroids, the 'clavi' of Visconti, of which 8 were produced by one sepulchre; each was attached to a ring, and the whole weighed 24 to 33 grammes (=370·37 to 509·26 grains avoir.). He would thus explain that debated passage in Horace (Epist. i. 6, 50):—

> Mercemur servum qui dictet nomina, lævum
> Qui fodiat latus, et cogat trans pondera dextram
> Porrigere.

The metal articles were mostly bronze, with a few iron. Analysis of the former (*fibulæ*) gave copper 84·26 parts, and 15·74 of tin. Of the nine specimens of *æs rude*, irregularly shaped (7), and

[1] Count Gozzadini (*Di un Sepolcreto*, etc., p. 20) published eighteen of these makers' marks, which are either upon the edges, the bellies, or the bottoms of the vases. Usually they are supposed to show the proprietor or the value of the article; they may be so on the two *fibulæ* of Villanova, but these valueless bits of clay would hardly deserve the honour.

parallelopipedons (2), as if cut from an ingot; the smallest weighed 12·52, and the largest 64·18 grammes (= 193·21 to 989·2 grains avoir.). Count Gozzadini, finding them only in four tombs out of 193, doubts their being Charon's fee—the conclusion is against Villanova being purely Etruscan. Of the 675 *fibulæ*, 550 were bronze, offering at least 11 several types; many were in pairs, as if used double to fasten the 'plaid;' and one tomb produced 30, several of them twisted and broken. The hollow heads were stuffed with a paste containing 65 per cent. of alum, oxide of iron and carbonate of lime, 30 of silex, and the rest water and loss; the enamel, which was generally dark blue and sometimes bright yellow, was composed of lime, silex, and oxides of iron and copper. The shapes are simple, delicate, and elegant, with fine curves and clearly cast angles; the elongated forms explain why long, lean Junius was called 'fibula ferrea' (Quinctil. vi. 3); and the ornaments are as various as the modules. Here a bird of many-coloured glass stands in relief; there the metal contains a bit of amber, which the old Etruscans appear to have valued as highly as the modern Somal.[1] Others had chains, beads of

[1] Prof. Capellini (*Congresso Internazionale, ec., nel* 1874. Bologna :

blue glass, and similar materials, with pincers, and decorations, either pendent, or strung to the convex portion.

The hair-pins numbered 53, besides the many which crumbled to pieces, and 6 were found in a single tomb. The large, hollow heads were stuffed, like the *fibulæ*, with siliceous paste, and the blade was long enough to be used by Fulvia, Herodias, or the Trasteverian virago. Some of these served to retain the hair in position, and others are the *discriminales*—so called from the frontal *discrimen* (parting) which, in the days of Tertullian, distinguished the matron from the maiden. Many of the shapes are still preserved by the peasantry of Polesina, and other parts of Italy. There were also bundles of rings, 29 items in one sepulchre, which, perhaps, were also used for supporting the hair. We find in Martial (ii. 66):

> Unus de toto peccaverat orbe comarum
> Annulus, incertâ non benè fixus acu.

The 'tutulus,' a pyramidal or conical Etruscan cap, more or less acute, which represented the

Gamberini e Parmeggiani, 1874) discusses the Bolognese amber—a red, not a polychroic, variety, which is still found at Scanello, and about Castel S. Pietro; whilst the polychroic has recently been discovered in the Cesenate. Thus the Umbrians and the Etruscans had no need to seek the semi-mineral in Sicily or on the Baltic shores.

modern chignon, also required some such support[1] besides the *tæniæ* (fillets) and the bronze plates, 17 millimètres broad, which resembled the ἄμπυκες of the Greek belles. There were rings of other sorts, especially groups of fives passing through a large circle which bore a peduncle. The average diameter was 8 millimètres (= 3·15 inches); a single ossuary yielded 46 bunches, besides 578 scattered specimens; they were, probably, the decorations of a dress consumed on the *rogus*, and, though cumbrous, they are not more so than the 'jets' still in fashion.

The small number (26) of bracelets, large and massive, thin and cylindrical, straight and twisted, shows that these articles were not of universal use, as we might expect to find amongst a people coming from the East. Some are περικάρπια (wristlets), others bracelets proper, worn by both sexes upon the upper arm (περιβραχιόνια); a single skeleton had an iron specimen, probably valuable in those times. One is marked with the broad arrow ↓; it also appears on the pottery, on a

[1] 'Tot premit ordinibus, tot adhuc compagibus altum Ædificat caput' (Juvenal, vi. 502), is painfully true in 1875. The *tutulus*, or lofty conical cap of the priest, is worn by women in the Grotta delle Bighe (Dennis, i. 330 and 341).

bronze hatchet from Villanova, on a cyst found near Bologna, and on a carved ivory in the Vulci necropolis. Some are bent and broken, evidently by a heavy instrument.

The *clavi*, or buttons, 8 millimètres (= 3·15 inches) in breadth, and 199 in number, might have been applied to the peplum or tunic. The ossuary used also to be similarly draped in very ancient times; and our modern churchyards still show its descendant in the shape of a veiled urn—a meaningless article until we again begin to 'cremate.' The other buttons were, possibly, rather ornaments than intended for buttoning.[1]

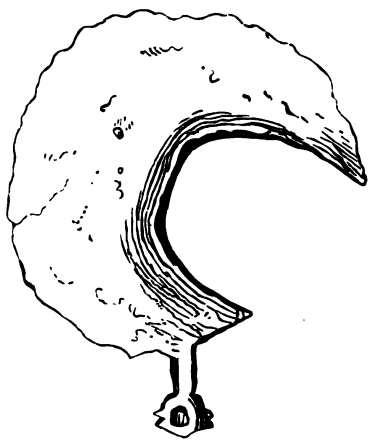
The warlike weapons were two thick and heavy lance-heads, with tangs to fit into the shaft—the lance is believed, despite Herodotus, to be of Etruscan origin. Of the Paalstab or hatchets (?) two were of iron and three of bronze. One of the

[1] I have never been able to arrive at any conclusion concerning the date when the button-hole originated. The oldest form, preserved by the peoples of the nearer East, is the loop which encircles the button. In Prof. Nicolucci's *Age de la pierre dans les Provinces Napolitaines*, published by the Congrès, he remarks of (p. 32) five almond-shaped stones: 'J'ignore à quoi les instruments pouvaient servir, mais on peut penser ou que ce sont des poinçons à double pointe . . . ou un bouton à fermoir pour vêtements, parceque, étroitement serrés au milieu avec un fil sur une peau ou sur du drap, ils pouvaient être commodément introduits dans un œillet, et tenir les pièces de vêtement solidement serrées.'

latter, found broken into four twisted fragments, is remarkable for the disposition of its wings and for the length, 9 centimètres (= 3·54 inches), being exactly half the breadth. The other, measuring 17 centimètres (= 6·69 inches) long, and 16½ (=6·5 inches) broad, has the wings or lateral points curved; and the unusually thin blade is only 1 millimètre (= 0·04 of an inch) thick; it might have been used in religious ceremonies or as a votive offering, like the large bronzes from the Danish turbaries described by Worsaae. There are five smaller articles (axes?), between 8 and 11 centimètres (= 3·15 to 4·33 inches) long, by 5 (= 1·97 inch) broad; and five have sockets instead of grooves. One shows an iron edge set in the bronze, which would suggest the baser metal to have been still valuable; yet 18 are wholly iron; and another bears the wedge **V**. Two little archaic horses probably belonged to the bridle-bit, offerings made when the steed was slain to carry the ghost into what Dahome calls Kutome, or Dead Man's Land.

The *cultri* number 10 iron to 18 bronze, which may almost be called copper, as the percentage of tin is only 3·93. The very thin handles of wood or bone were rivetted by short screws. The most

peculiar, but by no means, as has been stated, peculiarly characteristic of Felsina, are a dozen 'ferramenta lunata' (Columella *De R.R.* xii. 56), with edges only in the convex parts of the crescents. These have been found in the islands of the Greek Archipelago, in Attica, Bœotia, in many parts of Etruria, and even north of the Alps. The fineness of the blade suggests the razor, which India preserves in the hatchet shape.



THE NOVACULA.

Thus we find in Martial (ii. 58),

> Sed fuerit curvâ cum tuta novacula thecâ
> Frangam tonsori crura manusque simul;[1]

and Pliny (N.H. xxxii. 5), terms a fish 'novacula

[1] Varro (*de R. R.* ii. cap. 11) tells us that the Romans began to shave about the fifth century U.C. But the learned Prof. Rocchi has

seu orbis.' Ten large and heavy iron knives, some with handles of the same metal, are the 'clunacula,' used to cut up the victims, and there are a few shovel-shaped articles, with ornamental hilts and bevelled edges, which may have served as bistouries to inspect the entrails.

Six bronzes, composed of two concentric circles united by five rays, may be *phaleræ* or horse-frontlets; but no other museum possesses anything like them.

THE BISTOURIE.

THE PHALERÆ.

Equally mysterious are the hatchet-shaped bronzes, with large rings for handles, and in some cases profusely ornamented on both sides. They

shown that this was a custom of the Etruscans long before that period. The cemetery of Alba Longa and the oldest Italic tombs have not yielded razors. Prof. Lignana (*Bullet. dell' Inst. Arch. Rom.* Jan.-Feb. '75), considering the words Ksurá (*Rig-Veda*), ξυρόν (Iliad, x. 173, ἐπὶ ξυροῦ ἵσταται ἀκμῆς), the German *scheere* (=shears), holds that the shaving implement was known to the Indo-European race before its separation.

are associated with small elongated rods of bronze capped at either end, and this suggested that the plate is a *trigonum* or *deltaton*; in fact, a gong sounded with the *virgula*. Real *tintinnabula* were known to the Etruscans, but that would not hinder them from using an article so common

throughout the East. On the other hand, when struck they yield no sound; they are evidently unfit for cutting, and the bronze nails always found near them suggest that they were mounted on staves and were carried in procession—the 'pelekys,' or axe, being an amulet against fascination. The Canadian,

or rather Catholic, superstition of church-bells frightening away evil spirits is found in Ovid (*Fast.* v. 4, 23).

> Temesæaque concrepat æra
> Et rogat ut tectis exeat umbra suis.

On which Gierig remarks: 'Æris autem tinnitum aptum esse habitum ad spectra ejicienda docet Neapolis;' and the Scholiast of Theocritus teaches us that the sound of brass was used in the most sacred rites by reason of its purity, and because it expelled abominations. Hence the bells was adopted by Christianity and rejected by El Islâm.

Three bronzes, whose long, broad handles and rounded heads represent *capedines* or cup-ladles for drawing wine during the sacrifices have also been found; one in a clay pot, probably the *urnula fictilis* serving for the same object; while a second was taken from one of the six distinguished tombs. The latter also yielded an inverted cone, with two moveable handles, to prevent the liquor being spilt, and a cover with the apical knob: this was probably the *amula* or *acquiminarium* for the lustration water, not the *situla* for sacrificial wine. Here were nails of sorts, one bearing on its broad head the cross, interlaced with the five circles of the mystic die. It

is suggested that the latter may have been used either for the coffin, or as an offering to Charon, in case his barque required repair. Less intelligible are the seven hollow fusiform rods with raised circles and hatted heads which so frequently occur.

Some antiquaries have seen in them spindles, or 'wharrow spindles'—those used when walking. But the practical *fileuse* declared that they are of no account for her trade.

It is a proof of high antiquity that only one 'idol' or human figure for worship was found. Better proportioned than are most archaic specimens, it appears, judging from the bosom, to be a woman; and there are signs of her having been placed upon a pedestal. The head bears the symbolic circle, with two reversed birds, whilst another pair of volatiles perches upon the haunches; and her arms appear to be holding two spherical bodies. All who are familiar with modern art in Egypt, Syria, and Persia will recognise these bird ornaments. The other figures are those on pottery and the archaic horses before mentioned.

Amongst minor matters are a small bronze sphere with two projecting points; a bronze ring with the mystic Tau; a little bronze handle richly adorned; four *volsellæ* (tweezers); an *auriscalpium* (ear-pick); five needles and nine bronze brooches. The bone implements are *fibulæ*, a cylinder (a handle ?), and other articles of less importance.

As regards the tomb-people, Count Gozzadini, judging from the phase of art and from the presence of the *æs rude*—a coin unknown to the days of Romulus[1]—determines Villanova to be not Umbrian, but Etruscan, of the earliest iron age, whose apogee of civilisation preceded the foundation of Rome. He utterly rejects the Gauls both

[1] With great satisfaction I see Mr. J. H. Parker, C.B., in his *Archæology of Rome* (2 vols.: Murray, 1874), sturdily preserving these time-honoured names, and thus protesting against the vague, nebulous, *wunderbar* myth-theories with which Germany during the last generation has infected the exact, practical, and matter-of-fact English mind. Perizonius, Pouilly, and Beaufort began the heresy, but left no school. As usual, it was adopted by the Germans, who carry out, but who do not invent; and Niebuhr—so great as a historian, so small as a topographer, geographer, and archæologist—took it up as an especial hobby. It has now tyrannised over the English mind for thirty-seven years, and the period (1825-1862) was unhappily that when political and other matters introduced a kind of Teutonomania into our island. The reaction began with M. J. J. Ampère's *Histoire Romaine à Rome* (1862); and lately M. F. Max Müller's theory has successfully been proved a 'solar myth'—with a tendency, I might add, towards the earth's satellite.

here and at Marzabotto.[1] He is joined by Henzen, who, with a host of others, first judged the sepulchres, chiefly from their shape, to be Keltic; by Dr. Forchhammer; by MM. Minervini and Fabretti (the great Etruscologue); and by Prof. Carl Vogt,[2] whose outspoken theories upon the subject of faith, *e.g.* 'L'Être Supérieur est un produit de l'ignorance et de la peur,' and upon the friendship between Mr. Calvert and King Cakombau (p. 307), must have somewhat startled the 'respectables' of the Bologna Congress. The late Professor Orioli, writing anonymously in the 'Arcadia' paper (T. 412–414; p. 58), offered the three following objections :—

1. The tombs were neither rock-hewn, nor of

[1] 'L'élément étrusque de Marzabotto est sans mélange avec l'élément gaulois' (*Extrait des matériaux pour l'histoire primitive de l'homme*: Toulouse, 1873).

[2] In 'Anthropophagie et Sacrifices humains' (*Congrès*, pp. 295–328) man is successively insectivorous, frugivorous, and carnivorous, or rather anthropophagous (p. 296). Cannibalism denotes a relatively advanced civilisation (p. 298). Every religion is, without exception, 'l'enfant de la peur et de l'ignorance' (p. 300); the 'Deity is unknown, and religion is the worship of the *inconnu*' (*ibid.*); 'Dieu est un superlatif, dont le positif est l'homme' (*ibid.*); 'les furieux couronnés de l'ancien Testament' (p. 308); human sacrifice amongst the ancient Israelites (p. 321); and a few other vigorous assertions of the kind, must have been somewhat 'shokin'' to the sons of that 'terre predestinée,' who combine easy incuriousness with a strong prepossession in favour of 'leaving things alone.'

opus quadratum, nor barrow-covered, after Rasennic fashion.

2. They contained articles of small value.

3. They had few weapons—he might have added, they lacked inscriptions.

He therefore determined the tenants to be of barbarous strain, aborigines, Pelasgi, Umbrians—a theory also supported by the distinguished Professor G. Nicolucci—or even the Boii Gauls, who ended the Etruscan rule in the fourth century of Rome. M. de Mortillet assigned them to the interval between the bronze age and the Etruscan occupation, and, 'pour ne rien préjuger sous le rapport historique,' he prudently indicated the epoch as that of early Rome, First Iron. Prof. Calori reminds us of Polybius (ii. 17), who declares that the adjacent Gauls trafficked with the Etruscans, and that the only art or science known to the former was agriculture. This assertion, however, is somewhat modified in the matter of metal by Livy (xxxvi. 40); in ornamentation by Diodorus Siculus (v. 27–30); and, finally, by modern investigation. That distinguished authority, however, is positive that 'l'antica necropoli alla Certosa è Etrusca, etruschissima.' Finally, Prof. Count J. Conestabile (pp. 74–81, 'Monumenti

e Annali di Corr. Arch.,' 1856), comparing Villanova with Stadler in the Trentine, draws from the architectonic forms and the interior disposition of the sepulchres the two following conclusions :—

1. The Etruscans everywhere varied their structures to conform with material means and with local customs.

2. The northern Etruscans did not display in their cemeteries scattered near the Po and about its Campagna the wealth and luxury of Middle Etruria. The latter has ever been the great centre, the chief, the most evident, and the most durable image of the civilisation and power of the race—a development which, we may add, resulted from commerce with Greece and the nearer East.

Despite this weight of authority, I must still withhold judgment. The late Count Giovanni da Schio (*loc. cit.* p. 15, etc.) seems to have shown satisfactorily enough that, in the Vicentine, Gallic are freely mixed with Etruscan local names. But a stronger reason is the similarity of the catacombs in Guernsey, not to mention other places, with these so-called Etruscan remains. The former we know to be Keltic from such names as 'Pouquelaye' (*Pwca*=fairy, and *lles*, a lay or place), 'Les Rocques

Brayes' (in Breton, 'Roc'h Braz,' *les grosses pierres)*; and 'L'autel du Tus' (or Thus), pronounced 'l'autel du Déhus'—evidently the Dus or Dusius of the Gauls. In Guernsey we have the hougue or cairn; the kistvaen (*Chambre des Fées*) containing human ashes, pottery, celts, and arrow-heads; protected by cap-stones or ledgers, and floored with irregular slabs and *round, smooth pebbles* (for instance, at La Creux des Fées); 'in which were deposited' ('Hist. of Guernsey' by Jonathan Duncan. London: Longmans, 1841) 'the bones, urns, and other vessels, with such offerings as the zeal or affection of the friends of the deceased was disposed to leave with them.'

I would not strain the resemblance. The kistvaen was found by Capt. Congreve, and, since his day (1845), by many explorers in India and other parts of Asia. But the slab and pebble floorings, which argue that the dead would pollute the sacred face of earth, are highly suspicious features, suggesting identity of race. On the other hand, we shall find the huts parquetted with this rudest of mosaic which still forms the pavement in the streets of North Italian towns, and the 'long home' in Etruria is often a palpable copy of the home. And,

again, I have shown (p. 51, 'Anthropologia,' No. 1, October, 1873), that the Tupi Brazilians buried water-rolled pebbles as well as stone implements with their dead.

PART II.

THE ABODES OF MAN

'L'Étrurie, par la civilisation Romaine, a hâté la civilisation de l'humanité toute entière, ou du moins elle lui a laissé par une longue suite des siècles l'empreinte de son caractère'

HUMBOLDT, *Cosmos* (II.)

SECTION I.

VARIOUS FINDS.

TAKING Bologna as a centre, the whole circle, with a radius of 22 kilomètres, and especially the line of the Via Æmilia, appears to be one vast repository of Etruscan antiquities. As early as 1848 Sig. G. Dozza discovered on the Ronzano hill, 4 kilomètres west-south-west of the city, various bronzes; a sword, with broken blade and handle; two bridle-bits, with small figures of horses; and a fragment of the fusiform and hatted rod before alluded to. Three years afterwards Sig. P. Calari unearthed human skeletons, bronzes, and coloured glass, near Sta. Maddalena di Cazzano, 15 kilomètres on the riverine plains to the east-north-east. In 1854 the property of Marchese Amorini, 13 kilomètres east-south-east of Bologna, and 6½ from Villanova, disclosed a sepulchre containing *fibulæ*, and a hair-pin adorned with glass. In this neighbourhood an estate belonging to the Marchese Lodovico

Mariscotti yielded such a quantity of laminated gold wire—an article found for the first time in the Bolognese—that it was secretly sold for a good round sum, and to the great loss of archæologists: presently an ossuary disclosed the true character of the find. In 1860 a slab and pebble-rivetted kistvaen came to light in the parish Delle Lagune, where the small torrential 'Rio Mavor' breaks through the Castlar gorge. It contained black pottery; clay 'dumb-bells' (see Sect. iv.) marked with a wedge (**V**); hair-pins; and a score of bronze *fibulæ* adorned with amber and figures of birds. Six kilomètres farther from the capital, in the parish of Canovella, nearly opposite Marzabotto, appeared two crescent-shaped *cultri* or *novaculæ*, and brooches (*fibulæ*), with beads of glass and amber. At Ramonte, in the opposite mountains of Medelana, were found pottery; circular bones with engraved lines; two bridle-bits; a fusiform, hatted rod; and a bronze ladle with a handle like an S inverted. In 1865 at Pontecchio, along the Reno, about 7 kilomètres distant from Bologna, and beyond Ronzano, a kistvaen, resembling those of Villanova, was opened by Sig. C. Monari, who gave the contents to the Communal

Museum ; here also Sig. Marconi found a crescent-shaped cutting-instrument. In 1866, below the hills near the Ghiaie torrent, close to the village of Bazzano, 22 kilomètres west-north-west of Felsina appeared ossuaries, fusiform rods, cylinders, *fibulæ*, stamped pottery, and other articles. At the Comune di Liano, near the Via Æmilia, in 1869, ossuaries and bronzes, and shortly afterwards other similar articles brought from the mountainous parish of Riosto, distant 15 kilomètres, became the property of Dr. L. Foresti.

Finds were made inside the new and outside the ancient city, at the Piazzale S. Domenico ; in the Via di S. Petronio Vecchio ; in the Cà de' Tortorelli (now Palazzo Malvasia) ; at the Pradello ; and in the Arsenale Militare. The three latter are especially interesting, because they disclose the remains of Old Felsina to the broad daylight of the nineteenth century ; they define the eastern, western, and southern limits of what Pliny, describing the Padan or eighth region of Italy, calls (N. H. iii. 20) 'Bononia Felsina vocitata cum princeps Hetruriæ esset.'[1] And here I would warn my readers that

[1] The translators, 'Bostock and Riley' (Bohn, 1855), remark (vol. i. p. 241) upon the word Bononia: 'The modern Bologna stands on its

Bologna is split, Etruscologically speaking, into two camps. These, under Gozzadini, the man of science and literature, everywhere see the necropolis and the sepulchre. Those, headed by Zannoni, the man of practice and experiment, find remains of house and home where their opponents detect only the long home. This difference will be especially noticed when we visit Marzabotto.

The Tortorelli mine was struck in 1856 when Count Ercole Malvasia was strengthening the foundations of the old palace (No. 262) to support new buildings. The site is the Via Maggiore, doubtless a section of the Via Æmilia, outside the two chief leaning towers, Asinelli and Garisanda. These 'donkeys' ears' formed in the sixteenth century the Ravennese gateway, which was probably added to the city in the eleventh century. Of the 'Torr dai Asnie' I may remark that it is the seventeenth tallest building in the civilised world—only $2\frac{1}{2}$ mètres lower than St. Paul's. A local poet sings of it as follows:—

> In sta Città al fra quel d' i Strazzarno
> Ch' ha la Torr dai Asnie, e la Mozza indrito.

The Tortorelli excavations were directed and

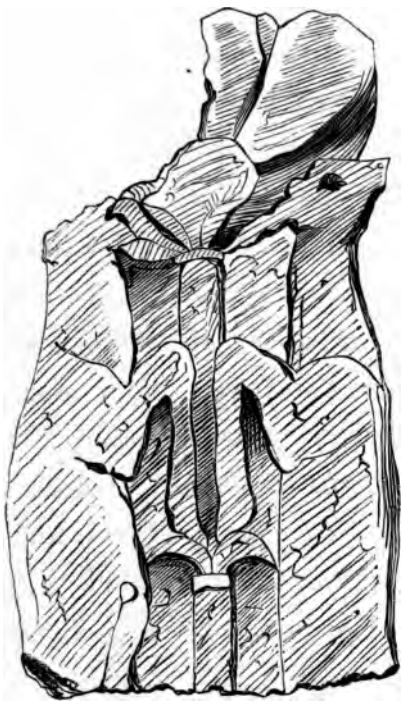
site, and there are but few remains of antiquity to be seen.' A score of years has brought with it many changes.

described in detail by Count Gozzadini ('Di alcuni antichi sepolcri felsinei,' vol. iv. pp. 74 *et seq.*, in the Neapolitan paper 'Giambattisto Vico,' 1857, and in the opuscule 'Di alcuni sepolcri della necropoli felsinea, Bologna:' Fava e Garagnani, 1868). Remains judged to be Roman were found at the usual depth of two mètres; eight sepulchres, of which three were intact, lay one mètre below their successors, and extended two mètres in depth, forming the normal total of five below the actual surface. Judging from the known cemeteries about Bologna, a small part of this mine has been worked and much is still hidden underground. The mortuary vases were eight ossuaries, sometimes set obliquely; *potoria*, possibly, for the *silicernium;*[1] the *crater* of purely Etruscan shape, and the various *tazze*, cups, cup-covers, and accessories of the tomb. Many were beautifully shaped, wheel-made, hand-smoothed, polished not varnished, and adorned with *graffiti.*[2] The metals are represented

[1] This mortuary feast, which survives in our cake and wine, consisted of meat, bread, eggs, beans, lettuce, lentils, salt and cates, especially the *mustacea* and the *crustula* (Kirchm. *de Funer.*, &c., p. 521).

[2] The English reader, accustomed to our sense of this word—'scrawlings' or 'scribblings' on walls, &c.—will note that in this paper it also is used after the Italian fashion (*graffito* being opposed to *liscio*, smooth) for denoting such marks as toolings on pottery.

by a single piece of oxidised iron, arguing a higher antiquity than the more distant tombs; and by many bronzes, crescent-shaped knives, fusiform rods, *fibulæ*, nails, and an *armilla*: a bit of amber, and part of the dorsal column of a young pike



THE MALVASIA CALVES.

(*Exos Lucius*, Linn.), which may have contributed towards the banquet, were also picked up. The most curious article is a *stela*, showing, in very flat relief, two calves erect and facing gardant, each

with the near forehoof on the bracts of a *caulis*. The shape is to the highest degree archaic, this curious monument was presented by Count Ercole Malvasia to the Archæological Museum of the Municipality.

At the Pradello (Pratello) on the opposite or western side of Felsina, within the modern gate S. Isaia, upon the properties Borghi Mamo and Casa Grandi, appeared in 1873 certain remains, which Count Gozzadini judged, from a gold and figured mirror, to be sepulchres ('Rapporto alla R. Deputazione di stor. patria per la Romagna,' 1873), and which Cav. Zannoni seems to have established as huts ('Cenno sugli Scavi della Via del Pratello,' etc.: Bologna, Gamberni e Parmeggiani, 1873). The man of practice compares them with the five *capanne* (hovels) of the 'Mamolo find' to the south, and with the 216 neolithic, and the 16 bronze-age huts discovered by Cav. Concezio Rosa in the Vibrata river valley,[1] which also yielded traces of the early iron period.

[1] This Abruzzian Valley extends from the Apennines at Montefiore, or Civitella del Tronto, to the Adriatic. A description of the finds, especially a fish-hook and lilliputian knives, will be found in pp. 25-27 of the *Congrès*. See also Prof. Capellini's *L' età della pietra nella Valle della Vibrata*. Quarto, three plates: Bologna, 1871.

The 29 Bolognese huts, distant about a mètre from the road, mostly circular and some oblong, occupied an area sunk one mètre below the actual road and 0·80 mètre (=2 feet 7.5 inches) under the ancient horizon, which may be called the virgin soil. A few were isolated, others communicated by passage or corridor 0·85 mètre (=2 feet 9·5 inches) wide, and a little raised above the level of the flooring; and the latter in both kinds showed either dark grey earth, chiefly animal matter, contrasting with the yellow calcareous soil, based on water-rolled pebbles, sometimes in double layers, which suggest that the pavement of the kistvaen was a mere imitation of the house. Some of the hovel-foundations had holes to admit the perpendicular supports of the conical or the pent-shaped roofs; and the walls were probably wattle daubed with clay, the adobe of which we shall presently see a specimen. Two huts had steps descending from north to south, and No. 25 seemed to be provided to the west with that manner of porch which the man of Central Africa loves. The earthen flooring carried in depth from 0·45 mètre (= 1 foot 5·7 inches) to 0·80 mètre (=2 feet 7.5 inches), and a section showed a number of small strata, sometimes sepa-

rated by thin layers of sand. Each bed was a conglomerate of remains. Amongst them, the principal were the *æs rude*, mostly 'scoriform,' then the laminated and the cylindrical; bronzes, *fibulæ*, plain and decorated; women's ornaments; and a fine spear-head. The pottery, which composed most of the conglomerate, was red, brown, and rarely black; a few bore *graffiti*, and some of the *ansæ* wore the semblance of equine heads. The makers' marks appeared on many fictiles, whose forms were either absolutely new, or resembled those of the Villanova, Tortorelli, and Arnoaldi tombs. The clay 'dumb-bells' were not wanting, and there were 'pendeloques' (pendants) of the same material. A few stone implements were found, and an extraordinary quantity of split bones of beasts, especially the stag, then the pig, sheep, goat, and ox. One cervine horn bore the tally as still used by the rustic world, and a handle was engraved with a rude sketch of some quadruped; there were also rings and thin disks of deer-horn. Cav. Zannoni ends his interesting letter to Prof. Calori with expressing an opinion that the remains are those of the peoples who had occupied, and who left their tombs at, Villanova, Cà de' Bassi, Cà de' Tortorelli, S.

Polo, the Scavi Arnoaldi, and other adjoining sites. He leaves to that learned archæologist the task of determining the race. The general opinion seems to be that these 29 huts were remains of the oldest or Umbrian settlement.

'The 'Mamolo find' precedes, in point of date, the Pradello. It was worked in January–April by Cav. Zannoni. The site is the Villa Bosi, outside the Porta S. Mamolo, or southern city gate, extending towards the Áposa rivulet, which is generally made the eastern limit of Felsina, and at the base of S. Michele in Bosco, where the Arsenale Militare all' Annunziata now stands. When ditch-digging near the right bank of the Áposa, and close to the modern 'road of circumvallation,' the labourers, at a horizon of about three mètres, came upon a huge doliform and ansated urn containing the covered *ossuarium* of coral-red clay—a double precaution also noticed in the Tortorelli finds. Prof. L. Calori examined the bones, and judged them, from a tooth-fang, to be those of a woman aged 30–40. Cav. Zannoni transmutes the sepulchres into five hut foundations. Here the yield is comprised in 26 gold earrings of full size, 6 *armillæ*, including one of iron, a bronze

spillone (pin or bodkin) 0·38 mètre (= 1 foot 2·96 inches) long; *fibulæ* with transverse sections of bone and amber; bits of amber; glass or vitrified clay, with spiral uniting bands, coloured, as usual, blue or yellow; and a quantity of fictile fragments, vases, *paterœ*, *urnæ*, and so forth. Count Gozzadini ('Intorno ad alcuni Sepolcri scavati nell' Arsenale Militare di Bologna.' Bologna: 1875), notices 5 tombs, of which only one was intact, and gives illustrations of two remarkable amber necklaces, (1) of 25 large spheroids, the largest in the centre, like a modern 'rivière;' and (2) also numbering 25. In the latter the forms are very various; some are imitations of the *bullæ* worn by patrician boys, whilst others represent shells (*Cypræa*, etc.), perhaps worn as amulets. He also figures a dwarf head upon a square base pierced with four holes; an image, which he would attribute to Phtah (vulg. Harpocrates)[1]; a band with four heads which appears to be the Egyptian coiffure; a fish-shaped ornament, also of amber; a pendant; a wonderfully-worked *fibula* with nine chimæras courant, retrogardant, and baillant; and two of the hatchet-

[1] The direct operator, under the Creative Will, in framing the universe.

shaped bronze plates which have been supposed to be gongs and bistouries.

The find in the Strada S. Petronio, near the Via Maggiore, produced only one remarkable object, but it is, perhaps, the most important of the whole.

This virile head, larger than life and cut in the 'molassa,' or common miocene sandstone of the country, is of very archaic type. The sides are abnormally flat, the long hair is combed off the brow, and the bearded chin is of Patagonian dimensions. Its similarity with toreutic works on the banks of the hill reminds us of Strabo's assertion (viii. 1, § 28) touching the likeness of Egyptian and Tuscan art. I have elsewhere suggested ('City of the Saints,' p. 555), after observing at the 'Dugway Station' the

untutored efforts of the white man in the Far West, that 'rude art seems instinctively to take that form which it wears on the bank of Nilus,' as babes are similar all the world over. Dennis (i. lxviii.) also denies that the rigid and rectilinear Etruscan style was necessarily imported from Egypt: 'Nature, in the infancy of art, taught it alike to the Egyptians, Greeks, and Etruscans, for it was not so much art, as the want of art.' My observation was presently confirmed to me by the graven images of gods in Dahome and on the west coast of Africa. Yet the discoveries made at Bologna have fully justified the assertion of Strabo, an eye-witness; and the evidences of intercourse between the races now so far separated, not only explain a mystery but lead to a highly interesting conclusion. The cosmogonic system of the Etruscans has hitherto been accepted with reserve. Professor L. Calori ('Della stirpe,' &c., p. 44), terms it 'Genesi Mosaica corotta,' and, with C. Heyne and others, throws doubt upon the accuracy of Suidas, a Greek of the later ages (*sub voce* Τυῤῥενία); but the late excavations of Mr. George Smith in Assyria distinctly prove that the 'Creation and Fall of Man-myth' extended from the banks of the Nile as far as the Tigris and

Euphrates; and a cosmogony so widely diffused would readily be introduced into Italy by an Oriental race of immigrants, were they Lydians or Phœnicians. Thus we may, upon this point at least, rehabilitate Suidas *versus* C. Heyne, and explain the 12,000 years' cycle of the old Etruscans.[1] Some writers, I observe, use Mr. George Smith's discoveries to stultify 'Darwinism,' and to establish the universality of a tradition consecrated by 'revelation:' future ages will admire this distortion of fiction into fact.

[1] Suidas is the only writer who relates that an anonymous Tuscan related to him how the Creator decreed a cycle of 12,000 years, half of which were assigned to the work of creation, and the rest to the duration of the world, the period of subversion, and perhaps of renovation, for gods and men. In the first millenary the Demiurgus made heaven and earth; in the second the visible firmament; during the third the sea and waters; in the fourth the great lights, sun, moon, and stars; in the fifth, birds, reptiles, and four-footed animals of the earth, air, and sea; and, finally, during the sixth, man. Here we have the germ of the modern theory which would prolong into periods, even of untold ages, what Genesis expressly asserts to be days, between 'Arab (Gharb or sunset) and Bakar, dawn or morning. The duodecimality of the Etruscan legend probably arises from a connection with the Zodiac: for the latter, see the *Zodiaco Etrusco* (with plate) by the late Count Giovanni da Schio: Padova, Angelo Sicca, 1856.

SECTION II.

FURTHER AFIELD. THE CERTOSA AND CASALECCHIO.

We have now seen, in the rich collections of Bologna city, the art and industry of the Etruscan man, and we shall find interest in an excursion to the sites which yielded them: a long day may profitably be spent in visiting the actual diggings. We will, therefore, set out along the western line of the Via Æmilia, passing the Pradello, and issuing from the S. Isaia or western gate.

The grand discovery of the Certosa (August 23, 1869) stimulated public curiosity, and Cav. Zannoni happily suggested ('fu millanteria, fu intuizione, fu intimo presentimento?') that detached groups of sepulchres would be found on alternate sides of the old highway extending to the city walls. The Scavi Benacci were begun in 1873, and early in 1875 I saw nine tombs and places of cremation which had been added to the 300 already laid open. As the ground is

under cultivation, the exhausted trenches, after the contents had been carefully sketched and measured by the 'Capo Ingegnere Municipale' had been filled up, *per non dannificare il podere.* The half-dozen labourers received at the dead season 1·25 lire per diem; and at other times 1·50 to 2 lire. Four distinct strata can be detected here and elsewhere, the section showing well-marked lines: 1st, and highest, (Roman?) mostly buried. 2ndly, buried and burnt (Etruscan?). 3rd, mostly burnt (Umbrian? Italic?). 4th, and lowest, (protohistoric?) all burnt. The base of the *rogus* measured each way 1·10 mètre (=3 ft. 7·31 in.); the north of the square was a *roll* of pottery, crushed by the weight of superincumbent earth; in the centre lay a pot-cover, and to the east were the remnants of the ossuary. A few yards further west were the Scavi (of Cav. Francesco) De-Lucca; two skeletons, with skulls to the setting sun, had been disposed in the *bustum*, some three mètres under the modern level; and at the lowest horizon was the *ustrinum.* The find which I witnessed was unusually rich; pottery with *graffiti*, a little iron, a quantity of broken and rotten bronze, and a knife-blade, straight-edged on one side, and on the other finely toothed. It was

probably a saw for cutting bones into objects of use and ornament.

Hereabouts are the (*Fondo Astorre*) 'Arnoaldi Diggings,' whence, about twenty years ago, an intact skeleton, with a figured vase, placed as usual on the left, was accidentally unearthed. Some forty-six places of sepulture and cremation were at once discovered in 1871–2, and, in 1873, silver-gilt *fibulæ* were brought to light. On Dec. 4, 1873, two bronze cysts, with raised rings,[1] were added to the two bronze *situlæ*, and other vases also with *cordoni a sbalzo*; to two armillæ, various *fibulæ*, the usual quantity of *æs rude*, and large and elegant potteries, covered, like those of Villanova, with *graffiti*. Four tombs were also exposed in the Predio Tagliavini, near S. Polo, and a trench, measuring nearly fifty square mètres, run from the Arnoaldi towards the Tagliavini diggings, was even more fortunate.

We now resume the high road to Florence, a fine macadam, nescient of the 'pike': to the right or north lies the railway, and beyond it, as far as the eye can see, stretches a plain flat enough to cause short sight in its inhabitants. The frequent villages

[1] They have also lately been found in the tumulus of Monceau-Laurent, Commune de Magny-Lambert (Burgundy), and at Hallstadt (*Rev. Arch.*, 1873: plates xii. no. 1, and xiii. no. 8).

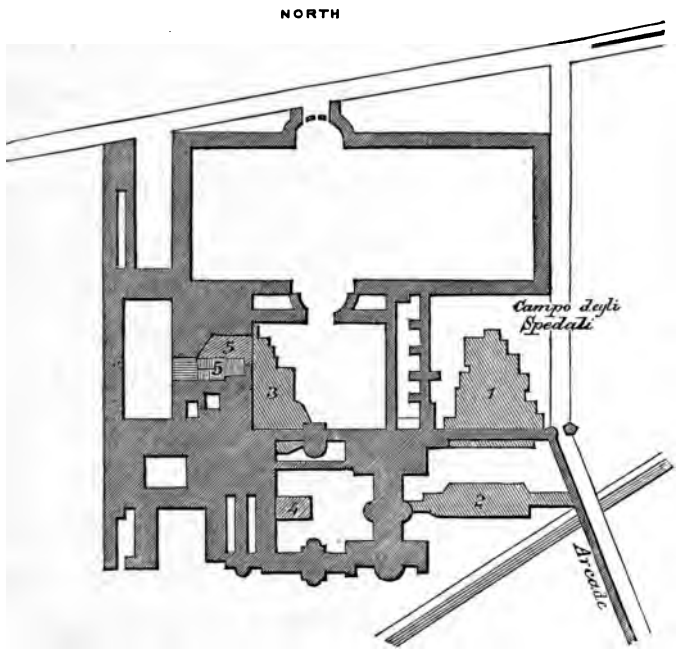
and steepled churches which rise above the vine-bearing elm and the poplars hedging the wheat-fields, give this valley a thriving and a pleasing aspect. To the left are the rib-ends of the Peninsula's dorsal spine, gently-swelling hills, either clothed in oak-scrub or patched with clayey white, denoting cultivation, and mostly crowned with villas and temples. After some 1,200 mètres from the city gate we enter the huge Certosa, whose lofty Campanile has long been our guide. Dating from A.D. 1335, it measures some two kilomètres in circumference. Fortunately it was reformed by Napoleon I., or its mines of antiquarian wealth would still lie buried. Now it contains only two seculars, a 'guardian' for the church, and a 'custodian' for the churchyards. The latter acts as 'demonstrator'; he is the nephew of a M. Sibaud, a Frenchman, who made the first find, but who did not know how to utilise his discoveries. In 1835, when the *pronaos* of the Pantheon, which is still building, was begun, bronzes and potteries were thrown up; and M. Marcellino, son of the old 'demonstrator,' presented in 1840 a bronze statuette to Dr. Venturoli, Conservator of the Archiginnasio (Old University) Museum at Bologna. When curiosity was thoroughly aroused (1870) the

relics were found by the present curator, Cav. Luigi Frati, stowed away in two boxes. They consisted of bronze *fibulæ*, fragments of *simpula* (ladles), a candelabrum very like the modern Italian, and similar articles. The pottery was comprised in a painted tazza and pieces of a great *celebe* for mixing wine and water, similarly adorned; an *amphora*, a *crater* (mixing-jar), and minor matters. After 1835 many small finds rewarded the workmen.

At length, on August 23, 1869, when a tomb was being dug somewhat deeper than usual, in the cloister (No. 3) called 'Delle Madonne in Certosa'; the *fossini*, reaching three mètres, came upon a bronze cyst, of the form before figured, containing burnt bones and a large silver *fibula*: both the band-box and its alabaster balsamary were broken. Cav. Zannoni at once repaired to the spot, and determined, with remarkable perspicacity, that the Campo degli Spedali, the burial-place of pauper hospital-patients, must contain an Etruscan cemetery: it presently proved to be the greatest necropolis found about Felsina. The Sindaco and Giunta allowed him to expend 50 lire, and thus began, under his superintendence, the 'Scavi della Certosa,' now so

famed throughout Europe, which show, perhaps, the most splendid age of the life of Felsina.

As the plan proves, we have five great groups. The largest (No. 1) lies in the northern part of the Campo degli Spedali, or eastern cloister; No. 2 is



PLAN OF THE CERTOSA.

1, 2, 3, 4, Groups of sepulchres in the Campo Santo. 5, The church.

south of it; Nos. 3 and 5 are all around and even inside the church; and No. 4 is in the Campetto delle Gallerie. The discoverer presently suggested that this necropolis, or rather this fivefold cemetery,

belonged only to the western *regio* of Felsina, and formed items of, perhaps, ten groups scattered between the city and its furthest western point.[1] He also suspected that the broad road, dividing the four greater groups into two, was a suburban branch-line of, or was perhaps, *the* primitive highway, which ran a little south of its successor, the Via Æmilia. He remarked also that the tombs and pyres of the wealthy were the deepest; and, surrounded by open spaces, that they immediately fronted the road, whilst the poor lay behind—we may see the same in England. How much the ground has changed is proved by the diggings, which show two distinct floodings and deposits of the Reno River.

We have seen the Certosa collections in the Museo Civico, and we have remarked how admirably they demonstrate the home life, the warfare, the religion, the commerce, the luxury of northern Etruria in the days of her highest development.

The sepulchres illustrate the two epochs called further north 'bruna-öld' (cremation), and 'hauga-öld' (inhumation, or rather tumulation[2]), the propor-

[1] *Sulle Ciste in Bronzo a Cordoni, ec., ec.* Bologna: Oct. 15, 1873.

[2] 'Haugr,' a cairn, is a Scandinavian word, which we have seen preserved in the 'Hougue' of Guernsey.

tions being respectively about 1 : 2. The depth of the *rogus* and *urna* varies from 0·26 mètre (= 10·24 inches) to 5·83 mètres (= 19 feet 1·53 inches); of the tomb between 1·21 metre (= 3 feet 11·64 inches), and 6·13 mètres (= 20 feet 1·34 inches): in both cases computed from the ancient horizon, which is 1·37 mètre (= 4 feet 6 inches) below the modern.

Cav. Zannoni (p. 23) offers the following plan:

					Depth. Minimum.	Depth. Maximum.
Burnt in	Urns	Fictile	Rude metals	. .	0·26	2·01
			Large-sized	. . .	1·06	„
			Figured	. . .	0·26	2·71
			Marble		— 1·11	
			Cysts		1·11	1·98
			Bronze Situla		1·16	
			Wells		3·98	4·48
	Fosses	of	1st degree	0·93		
			2nd „	mean 2·88	0·76	5·83
			3rd „	4·02		
Buried in	Fosses	of	1st degree	1·85		
			2nd „	mean 2·83	1·21	6·13
			3rd „	4·55		

For the interment of the whole body were found (p. 10) the four following arrangements, with their proportions out of a total of 250:

1. 83 rectangular unlined fosses of various size, with the skeleton and the various articles almost always deposited on the ground to the left.

2. 122 same kind of fosse, with rounded pebbles

thrown confusedly over the skeleton.[1] This total, however, includes No. 4.

3. 45 fosses with long wooden coffin (Pliny, xiii., 27), of which only fragments and nails remain. The *arca* was sometimes covered with earth.

4. The small fosse, with walls lined by un-mortared pebbles. Here nothing is said about the kist-vaen; and Cav. Zannoni seems to allude to one only (p. 14).

Cremated remains were disposed in three ways (p. 10). Out of 115—

I. 72 in bronze cysts and *situlæ*; in fictile pots (plain, 36; ornamented, 20 or 1·80 to 100 of the figured, and one in a marble vase.

II. 41 were in fosses, or 0·56 to 100 of the former.

III. The two wells had each one.

There is little at present to view in the Chartreuse, except the local lion, its modern cemetery.

[1] Here, again, we have the precaution of not allowing the corpse to touch the earth. The Moslems, on the contrary, do not permit the earth to touch the corpse; the idea being that it would cause pain to the still sentient clay. I wonder much that when all the press in England, during the winter of 1874-5, was discussing an improved form of sepulture, suggested by Mr. J. Seymour Haden, no one pointed out how the system had extended through the Moslem East since the days of Mohammed, and probably for an indefinite period before him.

The entrance-hall contains the monuments which precede the seventeenth century; and one of them, a sarcophagus on four dwarf pillars, resembles Petrarch's tomb at Arquà. The necropolis is thoroughly Italian, and one of the most remarkable of its kind. Series of arcades, developing their long galleries around the cloisters, embrace the little old Certosa church which formed the nucleus of the big new establishment. The bodies of the wealthy are deposited under the pavement, or in the thickness of the walls; whilst the poor lie in the open central grounds. The walls of the Campo Santo are adorned with busts, reliefs, and statues, some of which pretend to considerable art and value—its general effect is somewhat that of a museum or a sculpture-gallery. The only remnants of the old tenants are a heap of water-worn oviform stones in the western cloister, and two similar mounds in the eastern, still showing the locality of the find. Even in the church, skeletons were disinterred, as may be seen from the fractures of the marble pavement fronting the altar; and a wall-tablet records the visit of the fifth Archæological Congress.

At the Certosa the useless arcade—I speak as a Briton—crosses the Florence highway, and runs up

to the hill church of S. Luca, a favourite place of pilgrimage, with a glorious view. Like that of Vicenza, this gallery once bore frescoes showing the 'stemmata' of noble families who built the several arches, but during French occupation it was degraded by whitewash. Our Gallic neighbours have not left pleasant memories in this part of the world; they seem to have taken example from their forefathers, the Boii, with the trifling difference of carrying off instead of destroying. A mile and a half from the Certosa places us at the villa of Count Denis Talon, whose grounds command a prospect ready made for its painter. Deep below the clay bank—here sleeping in stagnant pools, where during frosts boys slide; there trotting in a thready streamlet, whose bed is a broad, white Arabian wady, in summer mostly bone-dry—lies the Reno River, no *taciturnus amnis*; at times the turbulent mountain-torrent, the general drain of many a *burrone* or gully, springs from its couch, in a mighty brown flood, and violently invades the fields on either side.[1] A solid dam of masonry crosses the Fiumara bed, and from the left bank sets

[1] For its classical claims consult the volume *Dell' Antico Ponte Romano sul Reno lungo l' Emilia, e della precisa postura dell' Isola del Congresso Triumvirale.* Memoria del Dott. Luigi Frati (Anno vi. Atti e Memorie). Bologna, 1868.

off the leat which supplies the city. Fertile ledges, the site of the ancient river-valley, limited north as well as south by mound-like and conical hill-ranges, denoting the old bank, mark where it debouches upon the plain. And afar, stretching from west to south-west, are the steel-blue peaks, bluffs, and blocks which, snow-capped in winter, part us from Tuscan Pistoja.

Madame de Talon takes an intelligent interest in the excavations upon her property beyond the Reno. We cross the stream by a solid bridge of stone-work, not too solid for its task, as the five arches, of which three are full-sized, are sometimes choked by the floods. Here is the modern 'Casalecchio,' a common term in this part of Italy, meaning a group of houses—Casalecchio di Rimini has lately distinguished itself by discovering a foundry of the later bronze age. The sixty tenements are covered by a *tête de pont*, and this forms a part of the earthwork line of vallation which defends Bologna on all but the southern or hill side. At the Osteria del Calza, famed for revelry on Sundays and Saint Mondays, we turn to the right, and ascend to the plane of the Diluvial epoch, when the Glacial disappeared in cataracts and cataclysms that swept everything before

them. The bank shows a section of the ground; humus based on a stratum of 'ghiaia,' and these water-rolled pebbles overlie miocenic marl, resting upon impermeable clay—we shall need this observation at Marzabotto. Vines and wheat flourish, but the trees are stunted. The find was made when digging a trench to replant the elms. Ancient Casalecchio stood at the very edge of the raised river-bank, limiting the stream to the north, with a dainty view, as if it had been chosen by Carthusians. The little cemetery lay behind it. In Roman cities we usually look for graveyards to the south; in the Greek colonies of Italy and Sicily to the north (De Jorio, p. 52); the only rule of Etruria is to seek the main lines of road. Three skeletons facing eastwards had been exhumed, and one was transported to Villa Talon, much to the horror of certain inmates. It was declared to be Roman by the fact of its lying upon broad *tegulæ*, or pan-tiles, under a sloping cover formed by two rows of the same pottery. This is probably the local variety for the earthenware coffins (*fictilia solia*) of Pliny (xxxv. 46). The remains *in situ* were puddings of broken and crushed wine-jars; the *ciottoloni* (water-rolled pebbles) used as flooring for house and tomb; and a bit of

intonaco (plaster or daub), an adobe-like mass, burnt red, but still showing marks of calcined stalks and the tracery of leaves. The other articles were a few coins comparatively modern; the sheath of a *fibula*, with fine *patina*; a number of solid *amphoræ*, and a fragment of pottery with bits of carbonised clay set, by way of ornament, in the lighter-coloured material. The owner will dig in a straight line between the skeletons, and if the labourers come upon the ancient highway a rich *trouvaille* may be expected. A little further down stream lies the property of Marchese Boccadelli, who is also preparing to make *fouilles*, especially upon the northern range of hillocks, the bank of a Reno much larger than it is now.

SECTION III.

TO MARZABOTTO, MISANELLO, AND MISANO.

BEYOND Casalecchio the Florence road follows the left of the valley, passing through well-cultivated lands, where even wheel-ploughs are seen, and amongst villas which must be charming in the summer heats. A total of 1 hour 15 minutes' sharp driving places us at the Borgo del Sasso, a substantial village, with the size of a hamlet and the houses of a city. Near it is the Cà di Bassi, in the Predio Cornelli, where six tombs were unearthed. One of them contained the skeleton, with bronze vases, a clay *tazza*, dice, and pebbles (counters?); the other five showed remnants of the pyre, bronze engraved *fibulæ*, with burnt-red pots, on some of which were *graffiti*, whilst the *sigli*, or makers' marks, were very clear. This is known from its owner as the 'Cornelli find'; and in the precipitous face of the rock-wall on the right are several caves: the entrances

are of that converging form by which the Egyptians effected an economy of lintel; and, if they have not been dug, the sooner it is done the better.

Beyond the Borgo we debouch upon the confluence of the Setta from the south-east with the Reno from the south-west. The picturesque view of sulphur-blue water, in broad, glaring white beds overhung by high banks; of gashed ravine and of shaggy foot-hill backed by the true Apennines, is justly admired, even in the land of 'rock, ruin, and ravine.' Nor less singular is the road at this pass, a blending of the highway and the railway. A deep cutting in the sandstone rock leaves a slice standing as a 'gardefou' upon the tall river-cliff; and, under the off or right side, 'pedionomitic,' *quasi*-troglodytic, abodes, cut, like those of Ariano (Capitanata), in the 'molassa,' line the bottom of the scarp. This bend much resembles the place where the French line from Beyrut to Damascus overlooks the picturesque Wady Hammanah. Thence we run up and down the left side of the Reno, where the road is built on arches against inundations, and, after 1 hour 30 minutes —which will stretch to two or three if you ride in a one-horse *voiture de place*—we reach the little station and village of Marzabotto. It is usually placed at

27 kilomètres from Bologna: Dennis (i. 35, 'Cities and Cemeteries,' etc.) says fourteen English miles; but I hardly think that we travelled at the rate of three leagues an hour. Here we find a decent 'osteria;' and we enjoy all the civility and cordiality, the good cooking, and the comfortable ingleside, combined with the moderate charges which characterise such places in the byways of Italy.

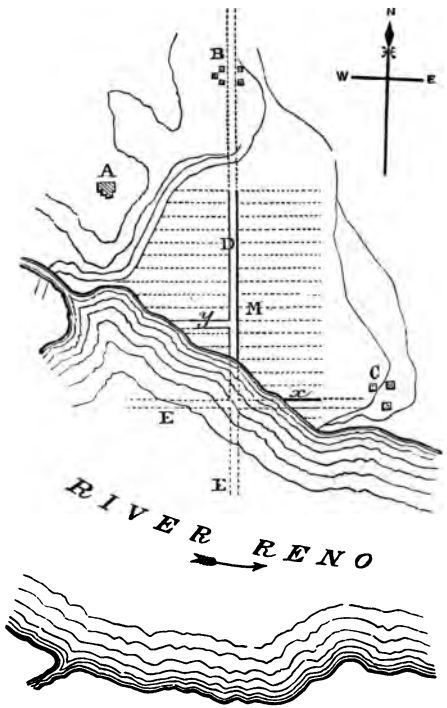
The bran-new Villa, with its single tall tower on the hill overlooking Marzabotto, belongs to the Aria family, now Counts of the Italian kingdom. The site has been known to Etruscologists for some years. As early as 1831 a number of bronze statuettes and other important objects attracted the attention of Micali ('Monument. Inediti,' p. 115, pl. xviii.). In 1850, again, other antiquities came to light, but they were readily dispersed. About 1862 systematic research was begun by the father of the present owner, the late Cav. Pompeo Aria, who died in May 1874 at the fine age of eighty-five. It is a thousand pities that he had not more sentiment of archæology than to build up the old stones in his new house; and that he did not employ more competent investigators than the rude men who superintended the works. On the other hand he was fortunate in

persuading Count Gozzadini to overlook part of the excavations; and he wisely printed and published at his own expense two illustrated brochures by his learned friend. These are entitled 'Di una antica Necropoli in Marzabotto,' &c. (20 figs., 1865), and 'Di ulteriori scoperte,' &c. (17 figs., 1870). The two large quartos (Fava e Garagnani), followed by 'Renseignements sur une ancienne Nécropole à Marzabotto,' 1871—a brochure for the use of the Anthropological Congress—have been noticed by a host of foreign writers. The Villa contains on the first floor a fine collection, of which the earlier discoveries are noticed by Count Gozzadini (p. 17, 'Di alcuni Sepolcri,' &c., and pp. 9–17 of the 'Renseignements'); and the town-house has, we are told, another. Unfortunately, when Count Aria goes to Rome he takes his keys with him, and, perhaps, the less a stranger sees of the 'fattore, fatto rè,' Giacomo Benni, a 'lewd fellow of the baser sort,' the better for the temper of both 'parties.'

The site of this Etruscan city, whose name, unless embalmed in the modern Misanello and Misano, has utterly perished, requires careful study. Count Gozzadini's plan is old, and it wants a profile and section of the ground; but there is nothing better to offer,

nor will there be until Cav. Zannoni has published his valuable volume.

Here the swift and brawling Reno, flowing from the south-west, forms a loop, with the long diameter



A, Misanello. B, The Campuccelliera tombs. C, Morello tombs. D, High street and road. E, E, Prolongation of the ancient city now washed away by the Reno. M, Misano. *x*, Cross street to the east. *y*, Cross street to the west.

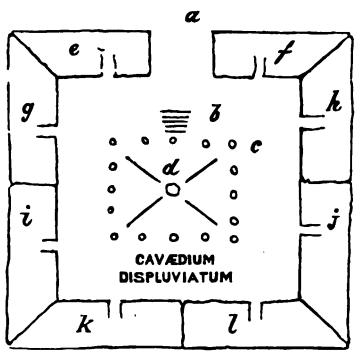
facing to the south-east, and then bends to the north and north-east. At the most important point it hugs the left bank, a perpendicular of friable materials, at least 80 feet high ; and thus it flows round

three sides of the wedge-shaped projection, which measures 700 yards in length by 350 of average breadth. This area, of 245,000 square yards(=50·62 acres), has two distinct levels; the upper, which supports Misanello, is the oldest part of the river-site, backed by the hills forming its bank. The lower (Misano) is a flat ledge, the raised side of the present river.

We begin by visiting Misanello. Passing through the *cour d'honneur* and the southern gate of the Villa Aria, we walk a few yards along a broad gravelled walk, dividing the garden, to a newly-built pillar; and we regret to see that these 'modern enrichments' almost equal in number the old remains. It records the names of Aria and Gozzadini, with the date MDCCCLX.; and it bears on one side (V)MRVS—probably a family name, which some have hastily connected with the Umbrians—and on the other AKIVS. Both are in Etruscan characters; they were found upon fragments of tiles, and a third inscription was yielded by a *fibula*. Beyond it begin the ruins, and here we at once enter upon debated ground. Count Gozzadini, followed by Prof. Count J. Conestabile and others, sees a necropolis; the Abbé G. Chierici and Cav. Zannoni

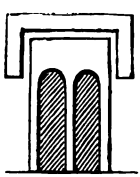
detect the abodes of the living, not of the dead. The foundations of the dry walls are water-rolled pebbles, varying from 1·40 mètre (=4 feet 7 inches) to two mètres in thickness. Upon these is laid the *opus quadratum*, of dimensions considerably smaller, and seldom exceeding two courses. The coarse calcareo-marly stone—according to the guide, an intelligent gardener—is still quarried in the Virgata Valley, some five or six miles up stream, and we shall find that it is nearly the only material used. The proprietor is entitled to our gratitude for the precaution of defending the old walls from Apennine weather by loose tiles, which can readily be removed on gala days. The numerous water-pipes, tubes hollowed in cubes of stone, an industry still extending from Trieste to Recoaro, suggest, as in Palmyra, the utilisation of rain. And now we come upon what appears to be distinctly the foundation, a house with a *compluvium* and a central cistern. I offer the following rude sketch, made upon the spot. The central well is fed by pipes, and the *cavædium*, the *patio* (Arabic 'bathah') of modern Iberia, is surrounded by a corridor, upon which the rooms and bed-chambers opened. We can restore the frontage of the Etruscan house with the aid of a *basso-rilievo*

in the Museum of Florence. It shows two figures, the one sitting, the other standing, backed by a doorway and two flanking windows, the latter of double



a, Main entrance to Atrium. *b*, 5 steps to Cavædium platform. *c*, The Cavædium, 15 feet square. *d*, The cistern (impluvium). *e–l*, The rooms.

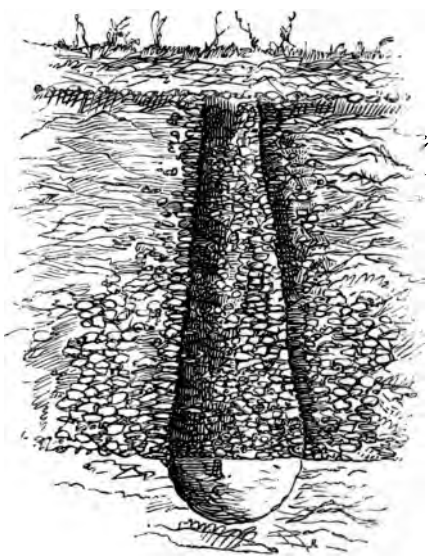
lights, and provided, like the Egyptian, with a square-headed and overhanging lintel, or rather capping of stone: this feature may be compared with



the rod-moulded door in Dennis (i. 233); his sketch, however, has panels recessed one within the other, perhaps suggesting the idea of a perspective. Of our Etruscan house at Misanello Count Gozzadini writes ('Renseignements,' p. 8): 'Un de ces puits s'élève sur l'ancienne surface de la nécropole par un rectangle de quatre mètres 36′ de large (= 14 feet 3·65 inches), et de 1 mètre 20′ (= 3 feet 11 inches) de haut, bâti en grosses pierres et en moellons à sec.

Il y a des degrés' (five can still be counted) 'pour y monter, comme dans les tombeaux de Castel d'Asso dans l'Étrurie moyenne, peut-être pour aller célébrer sur le défunt des silicernes annuels.' With this conclusion we simply join issue.

The wells—which, with the two at the Certosa,[1] number twenty-seven—have again given rise to a long debate. We will begin by dividing them into

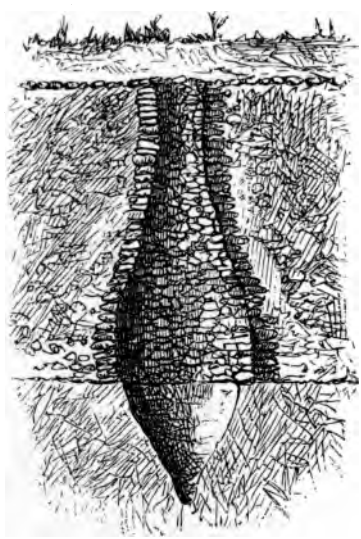


Round-bottomed Well.

two kinds, the round-bottomed, and the pointed like the *amphora*. The average depth varies from 2·10 mètres (= 6 feet 10·68 inches) to 10·25 mètres

[1] In the Certosa wells the bodies, as has been said, were burnt.

(= 33 feet 7·54 inches). The most remarkable is seen in section upon the lower or Misano level, cut by the modern Pistoja road, which took the place of the highway on an upper gradient. It is well preserved; still fed by drainage, and said to be 16 mètres (= 52 feet 5·92 inches) deep: no corpses were found in it. The orifice varies from 30 centimètres



Sharp-bottomed Well.

(=11·81 inches) to 77, and even 80 (=30·31 to 31·50 inches), abolishing the theory which makes the mouth too narrow to admit a human being, and suggesting, consequently, that the walls had been built up around the remains. In all cases there

is a revetment of mortarless pebbles, allowing percolation, whilst the bottom is sunk, to prevent loss, into the impermeable clay which we remarked at Casalecchio.

These so-called *puits funéraires*, 'which would be a unique feature of Etruria,'[1] were found to contain bronze vases and rings, ceramic tablets—one inscribed with a single name—pottery, and painted urns, with several strata of bones, chiefly of sheep and goats, pigs and dogs. According to Prof. Count J. Conestabile ('Congrès,' p. 257), but upon what authority I know not, 'from one to three human bodies were found in them, sometimes in the raised and doubled position, as shown by certain tombs of the Stone Age. They were surrounded by pebbles, which also underlay the head, probably for protection; whilst in the lower part and under the skeleton there was generally a large urn.' Similar constructions have been found in Savoy and in Transalpine Gaul, especially at Troussepoil, Beaugency, Villeneuve-le-Roi, Triguères, and Gourge. According to M. Quicherat this custom began, not during Gallic autonomy, but only after the Roman

[1] This was asserted by Prof. Conestabile at the Congress, but it is by no means the case, as will presently appear.

conquest. In Middle Etruria, Dennis (i. 121) at first believed them to be 'silos,' the 'sili' of Sicily, and the σειροὶ or σιροὶ of the Cappadocian and Thracian Greeks, but he presently 'had not the smallest doubt of their sepulchral character.'

I find it easier to believe either that a similar form was superstitiously used for the sepulchre and for secular purposes, or that these were simply cisterns and 'silos' proper, into which skeletons and other articles have been thrown, perhaps during the sack of the settlement. If Misanello be a village they cannot be funerary; and, at any rate, the way in which they are scattered over the lower level (Misano) instead of being aligned, like all other Etruscan sepulchres, along the main roads, is a strong argument in disfavour of the sepulchral theory which is now generally waxing obsolete.

We presently reach a feature even more interesting. Count Gozzadini tells us (*loc. cit.* p. 9): 'Une tombe, bien plus remarquable et bien plus grandiose, mesure 10 mètres de longueur sur chaque côté, sans compter un avant-corps avec dégrés' (five also here visible), 'lesquels auront servi au même usage que ceux du puits funéraire, c'est à dire à monter pour célébrer les silicernes annuels. Il ne reste de cette

tombe que le soubassement de tuf, *opere quadrato*, de 1 mètre 19′ (= 46·85 inches) de haut, de style Toscane sévère, bien sculpté, et correspondant à celui de semblables monuments sépulcraux de l'Étrurie moyenne, et notamment de Vulci, de Caere, de Alsio, et de Tarquinii, *qui cependant en diffèrent par ce qu'ils sont circulaires.*'[1]

But the latter is an essential difference. At first sight I recognised a temple, an *ædicula in antis*, and I was pleased to find that the same idea had occurred to Cav. Zannoni and to the Abbé G. Chierici. We cannot forget that a modern author, whose Etruscan vagaries will be alluded to in a future page, absolutely asserts[2] the non-existence of Etruscan temples, despite the 'Fanum Voltumnæ' of

[1] The italics are mine.

[2] What can we make of parallel passages like these?—

'There are reasons to believe that there were temples in some of the Etruscan cities' (p. 49).

'There is not a vestige left of a single Etruscan temple, or of a single Etruscan palace. Their constructive powers and the resources of their decorative arts were lavished on their tombs' (p. 41).

Nor can I see by what right Mr. Isaac Taylor declares (p. 326) that 'the Fanum Voltumnæ was not a temple.' Its identification with the cemetery of Castel d'Asso or Castellaccio has been questioned by Dennis (i. 239), who shows some reasons for preferring Viterbo (i. 196) and its church of Sta. Maria in Volturna.

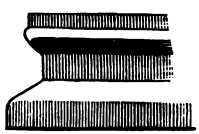
Livy (iv. 23, &c.), where the deputies of the Federation met, and the express statement of Servius (*ad Æneid*, i. 422) that every city of Etruria, 'genetrix et mater superstitionis,' had its threefold temple—outside, not inside, the walls—lodging the Triad, Jove, Juno, and Minerva, whence the triple shrine of the Roman Capitol (Dennis, i. 520).

The most careful excavations in this platform failed to produce any trace of human remains. The following is Cav. Zannoni's rough restoration of this highly-interesting building. The direction of the long walls is from north to south; and the steps show the entrance. The podium supported four monoliths, truncated columns, of which some were found with socket-holes, probably to hold wooden pillars. Vitruvius (iv. 7) represents the epistylia to have been wooden; hence the broader intercolumnations than in the Greek orders, and hence, probably, the reason why none of the temples are standing. We have remarked that the system is not yet wholly obsolete at modern Bologna: a house in the Via Maggiore, close to the two great Leaning Towers, still preserves the old Etruscanism; but this survival is about to be 'im-

proved off.' The posts supported architrave and cornice; there was, probably, a tympanum with central light, possibly with sculptured figures; and a

TEMPLE OF MISANELLO RESTORED.

Profile of the base still existing.



Height of base 3 feet 10·85 inches.

sloping roof is denoted by the find of many large tiles and antefixæ. These civilised ornaments, hiding the ends of the joint-tiles, number 110,

suggesting that they were also equally applied to sacred and profane buildings, sepulchres, or houses. Some are plain; others are encaustic with human heads in demi-relief; and a few are decorated with graceful palmlets raised and coloured.

Prolonging our walk for a few yards with an easterly bend where the ancient river-bank slopes to a lower level, we find another modern building inscribed 'Sorgente Etrusco,' from a relic which has been unwisely removed. Beyond it a bran-new obelisk—single, as usual, for greater disgrace—bears the name of Prince Humbert, President of the fifth Anthropological Congress, and the date of his visit (October 5, 1871). The base shows at the four angles as many archaic rams' heads, with the profiled eye drawn, after the Egyptian fashion, as if fronting the spectator.[1] They are copied from a colonnette

[1] My venerable friend Prof. Owen (*Journal of the Anthro. Institute*, p. 244, vol. iv., no. 1., April—July, 1874) explains the 'elongate, deeply-fringed, almond-shaped eye-aperture' of the Egyptian Middle Empire by the effects of solar glare and sandy *khamsín* contracting the winker-muscle (*orbicularis palpebrarum*). The strong action of this muscle, whose fixed point of attachment is to the inner side of the orbit rim, a little below its equator, would draw the line of the eyelids obliquely downwards and inwards. Hence, in artistic work, the slight exaggeration of the rim of the outer and the dip of the inner canthus. The law once passed in so hieratic a country would become unalterable for all time, and it would naturally extend from the human eye to all eyes.

in the Aria collection; and the local theory is 'qu'ils semblent se rapporter au culte de Amon-ra.'

Beyond the obelisk lies the original Etruscan aqueduct of Misanello, said to have been found 30 mètres (?) below the surface. There is a central reservoir of hollowed stone, and three cut conduits sufficed, as the fourth would have led up-hill: moreover, in the latter direction there is a perennial pond, which may date from Etruscan days. All are large parallelopipedons of squared tufa. Upon the slopes head-stone shaped boards, marked and numbered, show where the sarcophagi were exhumed. The graveyard is thus sharply demarked from the town, which lay upon a higher level. The general aspect at once suggests that Misanello is the arx or acropolis, probably an older foundation than Misano. It has its temple, its aqueduct, and its necropolis—in fact, all the requisites of its social life.

During the visit of the Congress three tombs, opened for the first time, yielded the skeletons of a woman, round whose arm-bone ran a bracelet, and that of a man armed with a sword. Concerning the general collection we will speak afterwards; here, however, was made the discovery of the admirable group and the amphora-bearing negro preserved in

the Aria Museum. The warrior-god, armed with a casque, whose front suggests the horns of Moses,[1] is offered a ritual *patera*, possibly for libations, by

the *Diva potens Cypri*, whose raiment, after the old Italic fashion, decently and decorously descends to her feet.[2] This group is 15 centimètres (= some 6

[1] Dennis (ii. 105) notices a warrior-figure, more than a foot high, whose 'helmet has a straight cockade on each side, almost like asses' ears.'

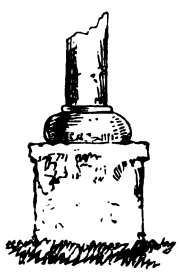
[2] Similarly the discoveries in Cyprus by General di Cesnola and Mr. Lang are remarkable for the modesty and even 'respectability' of

inches) high, and its evident imitation and adaptation of Greek art renders it most valuable. The negro is also no mean work. Prof. Count J. Conestabile declares that in it 'l'imitation du *vrai* est absolument obtenue d'une manière magistrale.'

Near an ignoble pond rises a tall bronze group of Mars and Venus, a modern enlargement of that found in the sarcophagus. There are also sundry modern antiquities scattered about the ground; and a third pool, supplied by a spring from above, here concludes the visitanda. Descending to the plane of the present bank we reach the second lakelet, an artificial water a few yards in diameter, also fed from the upper heights. A central pile of old stones forms a 'cavern,' which can be approached by a boat or by a bridge with wooden rails, painted to resemble bamboo—the whole in most approved cockney style. Here are the sarco-

the statuary and the reliefs, where the reverse might have been expected.

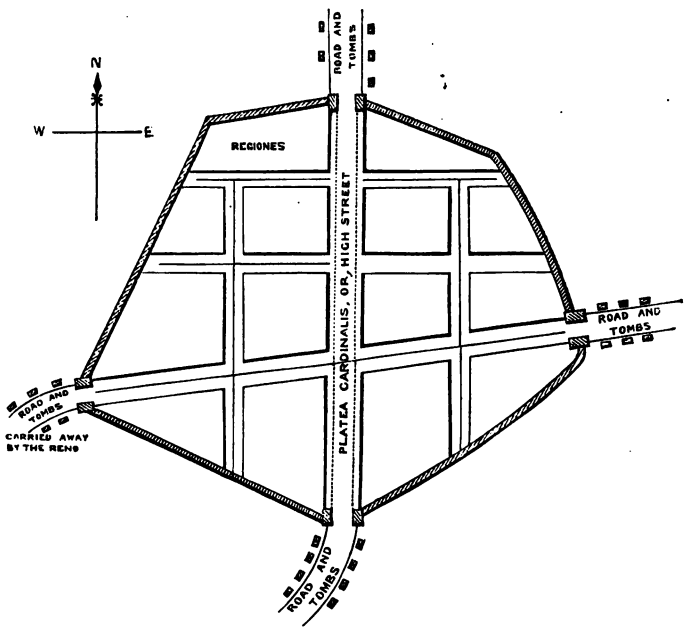
phagi removed from Misanello. They are upon the surface, not sunk in it, as was the invariable custom —this is, perhaps, a necessary evil, in order to display them without the necessity of digging out a large area of ground. But the tombs have been disposed pell-mell, without any regard for orientation, and, worse still, the pieces have been put together in the wildest way. Thus the columns belonging to other buildings have been planted where the pent-shaped lid of the sarcophagus positively forbade such ornamentation. As might have been expected, many a casual visitor has carried away the impression that we have here the origin of our truncated columns placed upon gravestones, and thus the Congrès (p. 225) actually sketches 'l'ancienne nécropole de Marzabotto' on the borders of the lake. The effect is something of this kind, and it forcibly suggests Père La Chaise, with its gravelled walks and trim hedges.



Of the spheroids and lenticular masses I shall speak in another place—*they* at least belong to the tombs.

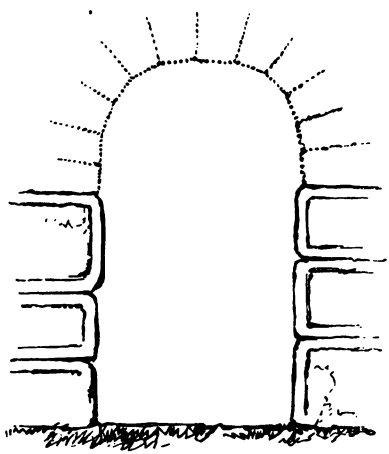
We now leave the handsome eastern gates of the park, and proceed south-eastward to the farm-

buildings of Misano (*fundus Missanus* or *Misanus*). Thence the path, bending southwards, spans vineyards and wheat-fields, which were ankle-deep in mud after the rainy morning of the Anthropological visit. Here are three of the old pebble-built rain-



cisterns, two to the east and one to the west. We are, doubtless, treading over the burial-place of the old city, and the whole 'podere' should be bought by the State and thoroughly explored. Cav. Zannoni would restore the form as above. It occupied the isthmus formed by the Reno—a site which

the Etruscans seem always to have chosen when possible. The shape was probably polyangular, not square; but the interior, we shall see, preserves the ritualistic form, oriented towards the cardinal points. The general style of single-arched gateway may be restored after this fashion, as three



THE GATEWAY RESTORED.

Bossed and draughted stones.

layers of bossed stones have been found *in situ*. The cuneiform system was apparently well known, and we may believe that the early Romans borrowed it, like the paved road, from the Etruscans. The

flat cuneiform arch (Dennis, i. 201) is essentially Eastern. I found it in the ruined cities of the Haurán, and traced it through Diocletian's Palace (Spalato), to the Castle of Kirkwall. The official city had, doubtless, large suburbs extending all around it.

A glance up-stream discloses a noble Apennine view, but we forget it in sorrow for the ravages of the Reno, which is still in the habit of shifting its *thalweg*. By prolonging the chief lines of intersecting street and road, we see that a large and important section of the southern and western *enceinte*, possibly half the city, has been eaten away and engulfed in the wild torrent. The latter, of course, has sunk many yards below the level of the Etruscan days.

The first remains to the west are pebble foundations of square and oriented cells, which have provoked abundant discussion. Count Gozzadini ('Congrès,' p. 278), gallantly owning that he will be glad to find himself in error, denies that they can be huts (*casupoli*), for a variety of reasons, which, in my humble opinion, do not appear convincing. He objects to the small size of some cells, not exceeding 1·75 mètre (=68·90 inches) in length, by 1·50 mètre

(= 59·05 inches); but how many a Hindú hut, Buddhist Vihára (monastery), and the lodgings in Sepoys' 'Lines' are not larger. And again, why should not the smaller divisions have been compartments? The depth of the foundation, a few centimètres below the pebble pavement, would not bear stable house-walls; but again, why should these not have been partitions (*intercapedines*)? Three arguments are drawn from the presence of 'funerary wells,' but this use of the *silo* is not proven. Pieces of pottery, like those taken from sepulchres, were found both in the cells and in the wells; but may they not also have been *imbrices* for roofs and other purposes? Finally, there were no passages from cell to cell. I believe that they have since been discovered: moreover, the walls are mostly rased to their bases, and would not show the threshold which, some two feet high, is still preserved in the abominable town called Bonny (West Africa).

Professor Conestabile hesitates about delivering a definitive opinion. On the other hand, the Abbé G. Chierici offers the serious objection that in excavations opened to the extent of 100 square mètres, the broken bones of animals appeared in abundance, whilst those of human beings were utterly or,

some say, comparatively, absent. The remaining objects: a long iron sword[1] and scabbard, votive arms and legs, idols, an *æs rude*, bronze and iron fragments, tiles and pottery, broken urns, bits of coloured glass, worked stones and bones, might have belonged to a settlement of the living as well as to a city of the dead. The tubes for conducting water, and the little clay windows admitting light into the roof, denote huts, not tombs: again, the situation as regards the 'High Street,' from north to south, would suggest that this space was included within the walls. The Abbé notices the remarkable likeness of the pebble foundations with the pre-historic, bronze-aged, *terramare*, or pile-villages of Reggio, Modena, and other parts of Italy.[2] Remarking that under the

[1] This blade, which is much longer than the usual bronze weapon, and lacks cross-piece, together with the iron lance-head, large and willow-leaf shaped, were deposited in the Aria Museum, and excited some discussion. M. Desor refers to the lances which Diodorus Siculus placed in the hands of the Gauls, and like M. de Mortillet, compares both weapons with those which had been found at La Tène, on the battle-field of Tiefenau, and other places. Prof. Conestabile replies that similar swords have been exhumed in Central Etruria. Presently a sufficient collection of facts will enable us to determine how far Etruscan art, original or imitated, may have extended north of the Alps.

[2] They are described in the *Congrès* (pp. 171-180). Older writers held them to be '*Ustrina*,' as if the dead were burned in water. According to the Abbé G. Chierici, the six *terramare* of Reggio, especially Sanpolo, the typical specimen which yielded articles of iron,

pavement of Etruscan Misano a second stratum appears at the depth of 0·70 mètre (= 2 feet 4·59 inches), and supports passages and houses with walls of clay, still bearing the tubular impressions of rushes, and wanting the bricks, the tiles, and the pottery so common in the more civilised successor, he would detect a still older settlement; in fact, the first colony of settled Etruscans who established themselves on the *champ rase* before walled villages were invented.

From the pebble-cells, a few paces to the east lead us across a hollow; it was intended as a cutting for the railway, which now runs in the Galleria di Misano, a tunnel below. Here we find a truly magnificent remnant of the 'High Street,' trending from north to south, and probably meeting its eastern and western intersector in the space beneath which the Reno at present rolls. Seeing this fragment, we can easily understand that the Romans borrowed their paved roads, like their monuments, from the Etruscans. These were the Plateæ, Cardinalis and

had square and oriented constructions of pebbles and also 'funerary wells'; they overlie the more ancient, bronze-aged pile-villages. He adds an illustration of Castellarano (*Congrès*, p. 285). In Italy the *terramara* or *mariera* is considered the third stage of the proto-historic habitation, preceded by the cavern, and the *palafitta*, or pile-village proper.

Decumana, which divided the city into quarters and regions, and which led to the Portæ Decumanæ, where the 10th Cohorts camped. A length of 300 (380?) mètres has been opened, but of this only some 120 feet remain for inspection. The breadth of the thoroughfare is 14 mètres, and the largest slabs, which are mixed with pebbles, exceed a square yard. The pavement shows no ruts, as if the biga were confined to the outside of the *enceinte* —still the rule in many Dalmatian cities. The broad central line is flanked by *crepidines*, path-ways on either side, the conveniences so common in Roman 'High Streets;' and suggesting, as at Salona and Damascus, triple gateways to the north and south; perhaps to the east and west. The deep flank-drains have orifices to gather the rain-water, and the middle is scientifically *bombé*. The two bands of large, square detached blocks which, disposed at regular intervals, run across the road, and determine the *trottoirs*, are usually explained as the *cippi* used for mounting horses when stirrups were unknown; and others remark that the spaces allowed the passage of carriage wheels—where no ruts are to be found. I would look upon them as the *succedanea* for bridges in muddy weather,

resembling on a grand scale those of ancient Pompeii, and the modern cities of the nearer East. The same kind of 'unbuilded, unarched bridges' are still remarked by visitors to Albanian Skodra.

From this noble Platea Cardinalis, or Grande Rue, a single line of secondary thoroughfare sets off at a right angle to the west; only a few feet now remain unburied. The fragment is ten feet broad, and in the middle appears a flag-covered conduit,[1] like those now existing in all the older Veneto-Istrian towns, Muggia and Capodistria, for instance. The modern fashion came from the 'Sea-Cybele,' and it extended south as far as Albania. The Eastern cross-street, of the same dimensions as the High Street (14 mètres), which led south to the Morello tombs, and which, prolonged, would intersect the main line in the Reno bed, has been re-interred. I am not aware that any of the *vici*, or smaller thoroughfares, have yet been uncovered.

And here I would utterly reject the theory of Count Gozzadini ('Renseignements,' p. 7): 'Ce ne pourraient être non plus les rues d'une ville très-antique, les deux grandes espaces, ou avenues, de 14 mètres de largeur, qui semblent couper la nécropole

[1] I cannot be quite sure of this feature.

dans la direction des points cardinaux; car on ne peut pas supposer qu'une ville, aussi ancienne que celle-ci, eût des rues aussi spacieuses et aussi bien alignées. De telles avenues seraient au contraire fort propres à faire des grandes divisions dans la nécropole, et à y donner accès; comme cela a lieu dans les champs cimetèriaux actuels.' The state of the arts at Misano disproves this conclusion.

From the High Street, a hundred yards to the north with easting, leads to the cemetery of Misano, which lying, of course, outside, defined the limits of the *enceinte.* Excavations are continued, but economy sometimes reduces the number of hands to two. The sarcophagi are placed upon the surface, so as to be in sight, and we can only hope that they will remain *in situ.* This Misano cemetery, as it is now called, shows a great variety of shapes and sizes; single and double, large-square and small-square, long-broad and long-narrow. The lids fit into rims sunk in the border of the caisson; they are pent-shaped, with a shallow elevation; none of them have columns, while spheres and disks of sandstone, some of very large size, are everywhere exhumed.

At the end of the visit we descended the path

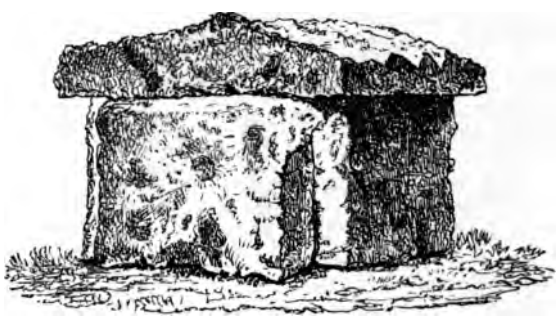
down the stiff earth-cliff to the north-east, and followed the leat taken from the Reno on the south-east of the buried city. This 'Canale del Molino' formerly turned the wheel of a dwarf powder-manufactory; the latter has been closed after sundry explosions, some of which lodged human arms and legs upon the poplar-trees of the adjacent avenue. Close below the belvedere of the Aria farm-houses, other monuments (Campuccelliera) have been found, proving that the line of sepulchres was prolonged to the north-east; and although the now sunken Reno is separated from the tall bank by an alluvial flat, over which the railroad runs, we can see by the water-lines, by the erosion, and by the dilapidation of the tombs, that the stream once swung near, and that even here there has been a considerable amount of destruction.

SECTION IV.

CONCLUSIONS.

We have now inspected the many objects rescued from the kistvaen and the sarcophagus; we have visited the homes and the long homes of the Circumpadan Etrurians; and we may venture upon a little cautious generalisation.

The external shape of the sarcophagus at



Misanello and Misano is of two great varieties. The first is the quadrangular coffin of tufa slabs, numbering 4 to 6. The dimensions are, length 0·90 mètre (= 2 feet 11·43 inches) to 2·27 mètres

(= 7 feet, 5·37 inches); breadth, 0·57 mètre (= 1 foot 10·44 inches) to 1·60 mètre (= 5 feet 2·99 inches); height, 0·42 mètre (= 1 foot 4·54 inches) to 1·92 mètre (= 6 feet 3·59 inches); the thickness of the walls is from 0·08 mètre to 0·32 mètre (= 3·15 inches to 1 foot 0·60 inch); the cover is generally of one, sometimes of two pieces; and though flat roofs are mentioned, I saw only the pent-shaped.

The second kind is surmounted by a heavy weight, which, under the pressure of earth, has

often broken through the lid, and has been found inside the tomb. The upper gradient was crowned by a cut stone, supposed, like the horse-shoe, to represent the Homeric σῆμα; the material was mostly *macigno* or sandstone grit, and water-rolled

pebbles; the shape was either spheroid or lenticular, and, in some cases, the diameter reached four feet. Prof. Conestabile ('Congrès,' p. 255) mentions, as a third variety of sarcophagus, rectangular bases and truncated columns, which suggested to him the *phallic stelæ* so common in the necropoles of Central Etruria, but he apparently did not see them. He also includes amongst sepulchres the pebble-lined wells, the 'caisses formées avec de grandes tuiles à couvercle, façonné en faîte' (coffins formed by the large *tegulæ*); the pebble-tumulus and kistvaen, and the pebble foundations before alluded to.

Incineration has prevailed at Marzabotto. Only three or four out of 170 contained the whole skeleton, which was supported by a quantity of marl and pebbles, and the presence of these articles did not appear accidental. The other contents were the *æs* (*rude, etc.*), of which each individual had at least one; pottery, statuettes, weapons, bronzes, *fibulæ*, mirrors, and a variety of gold ornaments. Almost all the sarcophagi had been violated, but one, which had remained intact, yielded no less than 57 objects of the precious metal. Besides these, there were *pietre dure* of fine cutting and archaic Etruscan gems, *e. g.* the carnelian scarabæus, with a walking Minerva,

cuirassed and winged; the more advanced, as the engraved quartz, showing the heifer Io stung by the gadfly, and the *pasto* 'tumble-bug' representing a tailed man contending against a fabulous monster that stands before him. As usual, amber and bone-dice were abundant, and so were the ossuaries, and the vases of plain and painted pottery. The bones picked up in the necropoles and the settlements are determined by Professors Cornalia and Rütimeyer to be those of the *Ursus arctos*, the *Canis familiaris* (and *palustris*?), the *Felis Cattus*, the *Mus Rattus* (?), the *Equus Caballus* (and *Asinus*?), the *Sus palustris* (and *Scrofa ferus*?), the *Cervus* (*Elaphus* and *Capreolus*), the *Ovis Aries*, the *Capra hircus* (with two other varieties), and the *Bos brachyceros*. The birds are chiefly the *Bufo vulgaris*, and the *Gallus domesticus*—this Indian bird suggesting by no means a remote date. The shells, probably used for necklaces, are principally the *Pectunculus glycimeris* (fossil) and the *Cypræa tigris*. So my friend, Professor, now Rector G. Capellini, an ardent archæologist, of whom more presently, when exploring the cannibal Grotta dei Colombi, in the Island of Palmaria, found and figured (plate 2, Fava e Garagnani, Bologna, 1873) a valve

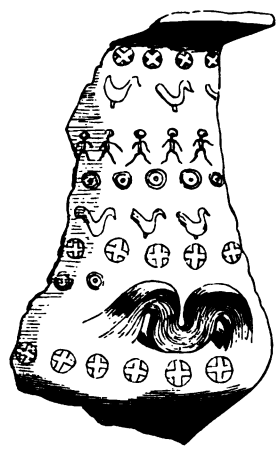
of the *P. glycimeris*, pierced near the apex, and a *Patella cærulea*, cut to form a ring.[1]

The essential difference between the systems of sepulture in Northern and in Central Etruria, is that, whilst the latter built in the interior of hills and upon plateaux adjoining the towns, the former laid out their graveyards in our modern style. Fortunately for students, we have thus three great monumental series, which cannot be considered to be of the same date; whilst certain crucial points of resemblance, for instance, the form, the system, and the ornamentation of the bronze *fibulæ*, and, briefly, the great lines of art, suggest the peoples to be of one race.

It is now given to us to trace how 'fortis Etruria crevit.' Villanova and the Certosa belong to Felsina, whilst Marzabotto stands grandly alone. The greater antiquity of the first-named is proved by the absence of statuettes; except the feminine idol with birds, the archaic horses, and the symbolical or conventional mannikins, raised upon the surface of

[1] Similar shells have been discovered in the Perigord Caves. Rector Capellini also brought from the Pigeon Grot large quantities of *Ostræa edulis*, *Natica millepunctata*, *Murex trunculus*, *Trochus turbinatus*, *Columella rustica*, *Patella Lusitanica*, *Helix* (*nemoralis*, and *singulata*), an undetermined *Triton*, and a *Dentalium* not belonging to the existing Mediterranean species. It was probably brought to Spezia, like the *Silex*, from some part of Tuscany.

an ossuary. The ornaments are chiefly meanders, disks, concentric circles, crosses, or circles containing crosses; and animals, ducks, geese, and serpents. There is no goldsmiths' work; the only iron articles are some few ornaments, several lance-points,



MANNIKINS.

two hatchets (?), knife-blades and shovels (?); and we must remember that the first kings of Rome were in the early iron epoch. Lead-alloy is also wanting in the *æs rude*, which is of a ruder type than that of its neighbours. At Villanova there are no bas-reliefs, no inscriptions, no *styli* for writing; and the cyst-shaped ossuary of bronze is supported by plain unpainted pottery, generally black, and provided with handles of various forms. Thus the

Congress was enabled to date Villanova from the ninth and even the tenth century B.C., synchronous with the early Etruscan epoch, or at the end of the bronze and the beginning of the iron age. The study of this period has served as guide to a host of sepulchral discoveries in Switzerland and Franche-Comté.

The general aspect of the Certosa shows the greatest splendour of Etruscan art, a progress and development which would place it several centuries later; Cav. Zannoni assigns it to about the fourth century of Rome. The bronze contains more lead, and an *æs grave*, apparently an *as* of uncial weight, would fix the date after U.C. 537 (B.C. 216), the year in which a decree of the Republic reduced the weight of an *æs* to an ounce.

Marzabotto is the latest of the three. Here we have three inscriptions, two on pottery and one on a silver *fibula*, besides three bronze writing-*styli*. The alloys consist of a greater proportion of lead, about 36 : 100. The *æs rude* is abundant; there is a large rectangular piece, perhaps the *æs signatum*[1] (first century of Rome), bearing the trident and

[1] It weighs, according to Count Gozzadini (p. 13, 'Renseignements' etc.), 2,157 grammes (=4 lbs. 12 oz. avoir., 45·14 grs.), and consequently exceeds by 367 grammes (= 12 oz. avoir., 454·52 grs.) the

the caduceus; while the *æs grave* is wanting. Iron is much more common at Marzabotto than at Villanova, the articles being chiefly keys, bracelets, lance-heads, blades and scabbards of long knives, daggers, or swords. A Greek inscription upon a fragment of pottery, (κακ)ΡΥΛΙΟΝ ΕΠΟΙΕΣ(εν), proves an advanced commercial intercourse. The *fibulæ* are often novel and beautiful: for instance, one represents a pair of tweezers; another, in silver, has a double spiral, and the lower end reverted, reminding M. G. de Mortillet of Gallic objects in the Museum of St. Germain. The metal might be considered rare, yet a hundred such 'bijous' have been found at Marzabotto. Gold, as well as silver, becomes more abundant, denoting ideas of luxury and a social condition which could appreciate the value of the material and the beauty of the work; often, indeed, both were combined. Of this fact the necklace and the pendants, supposed to form part of a feminine collar (*torques*), figured by Count Gozzadini ('Di ulteriori scoperte a Marzabotto,' plate xvi., No. 11, *a*, *b*, *c*; xvii., Nos. 2 and 3), are sufficient proofs.

heaviest specimen cited in Mommsen's *Monetary History*. The *æs rude* weighed from 10 to 24 grammes (= 169·33 to 406·40 grs. avoir.) and contained about 36 per cent. of lead.

Finally, the bas-reliefs and statuary, numbering about a hundred, enable us to compare the most archaic style (Venus), shapelessness, disproportionate limbs, unnatural length, rigidity, and drapery adhering to the body, with that of the most advanced civilisation (Venus and Mars). Thus Prof. Count Conestabile is of opinion that the necropolis of Marzabotto was used for a considerable period after the Boian and Lingonian invasion; whilst the Abbé G. Chierici is of opinion that both Misanello and Misano owe their destruction to those barbarians.

PART III.

THE ETRUSCAN MAN.

'Nulli nota poetæ
Illa fuit tellus, jacuit sine carmine sacro.'

SECTION I.

THE ETRUSCAN MAN.

We have now seen the arts and industry, the temporary abodes and the eternal homes of the Circum padan Etrurians: it remains only to interview what is left of the man himself. Here, again, a short preparatory course is advisable, a glance at the early geological history of Italy, especially at the central regions in their long career of adaptation for humanity. The palæontological field has been admirably worked by the writers of the Peninsula: amongst them we may single out Senator Ponzi ('Atti della R. Acad. dei Lincei, 1871,' and many other publications), who offered to the Congress of Bologna (pp. 49–72) a synoptic table and a *résumé* of the five great periods belonging to the annals of our kind. He shall tell his own tale of cataclysms and convulsions, although modern belief prefers attributing to the normal activity of the present day, prolonged through unnumbered ages, what was

formerly held to be the work of paroxysmal epochs.[1] But the last of the catastrophists has not yet gone his ways: the mantle of Murchison seems to have fallen upon the shoulders of Prestwich.

I. The *Lower Pliocene* of the Tertiary Age, when the nummulitic strata are being laid, is a period of calm and of sub-tropical temperature, represented by the calcareous formations of Macco. The presence of Pliocene man in Italy is still disputed. Professor Nicolucci, of whom more presently, would place him in the centre of the Peninsula ('Congrès,' p. 234). The Jury of the Congress (p. 520) opines that man existed during the uppermost Tertiary[2] or the

[1] The following table shows at a glance the four periods (A, B, C, and D) of the greatest excentricity during the last million years; and the several glacial epochs which resulted from it:—

	Years before A.D.	Excentricity of Orbit.	Difference of distance in millions of miles.	Winter days in Excess.	Mean of hottest month in the latitude of London.	Mean of coldest month in the latitude of London.
D	1,000,000	·0151	2·75	7·3	83° F.	21° F.
C *a*	850,000	·0747	13·5	36·4	126°	—7°
C *b*	800,000	0·132	2·25	6·4	82°	22°
C *c*	750,000	0·575	10·5	27·8	113°	0°·6
B *a*	210,000	0·575	10·5	27·8	113°	0°·7
B *b*	200,000	0·567	10·25	27·7	113°	0°·9
A	10,000	·0473	8·5	23	105°	5°
		·0168	3	8·1	84°	20°

[2] Mr. Frank Calvert, of the Dardanelles, declares that he has found traces of Miocene (Tertiary) man. From a cliff-face composed

oldest Quaternary or Post-Tertiary Age.[1] In the Newer Pliocene sub-division the sub-Apennine sea beats upon the mountains, depositing yellow silex in the shape of extensive sand-beds which, however, Nicolucci would attribute to a later age. The cold, presently extending from the Poles towards the Equator, causes a general and secular, as opposed to a seasonal, emigration of the fauna both from higher to lower latitudes, and from the uplands to the netherlands.

II. Follows the *Diluvial Epoch* at the end of the Tertiary period and at the opening of the Post-Tertiary Age: it is synchronous in the Apennines with the Alpine diluvium. The temperature, falling still, produces terrible meteoric convulsions. The condensation of vapours precipitates masses of water in successive deluges and whirlpools, accompanied by incessant electrical discharges. The

of strata dating from that period, at a geological depth of 800 feet, he 'extracted a fragment of the joint of a bone of either a dinotherium or a mastodon, on the convex sides of which is deeply incised the unmistakeable figure of a horned quadruped.' He also exhumed a flint-flake and bones of animals longitudinally fractured, probably to extract the marrow. The discovery has set at rest all the doubts of Sir John Lubbock (*Pre-historic Times*) and M. L. Figuier (*Primitive Man*).

[1] The term Pleistocene was proposed, on palæontological grounds, by Lyell, to demark beds later than the latest Tertiary, and older than the deposits of the recent period.

resulting torrents sweep towards the ocean, which still breaks against the Apennines, enormous burdens of *débris* breached from the ancient rocks; and thus thick beds of conglomerates, breccias, and amygdaloids, showing the turmoil of the waters, are deposited upon the yellow Tertiary sands. The aspect of the Peninsula remains that of a complicated archipelago, and the emerged lands are covered, as their fossilised remnants prove, with dense forests of oak, pine, and other tall trees. The fauna continues to be the same, but the tempests and deluges compel it to seek shelter in the caves.

Primitive man, a nomad like his congeners, doubtless occupied at this epoch the higher Apennines, together with the elephant, rhinoceros, hippopotamus, cave-bear and hyæna, *Bos primigenius*, hipparion, and *Cervus elaphus*. The necessities of offence and defence taught him the use of stone weapons; and we can hardly be surprised that the invention was not only anterior to history, but was even unknown to the earliest legends. Suetonius ('in Aug.' cap. 72) gives us an interesting detail concerning the Cæsar who may be called the Father of proto-historic Anthropology: 'Sua vero . . . .

excoluit, rebusque vetustate, ac raritate notabilibus; qualia sunt Capræis immanum belluarum, *ferarumque membra* prægrandia, *quæ dicuntur* gigantum ossa et arma heroum.' The italics show that the Romans were not so ignorant of palæontology. Aldovrandi ('Museum Metallicum': Bononiæ, 1648, p. 600) calls the fossil sharks' teeth *glossopetræ*, and tells us that others had termed the article 'lapidem ceraunium, nempe fulminarem.'

The first undoubted evidence of Italian[1] man appears in the diluvial breccias and upon the Janiculan hill,[2] at Acquatraversa, on the Via Cassia, which yielded two silex-flakes. As the stone implements are transported, it would, perhaps, be logical to admit the possibility of their pre-existence amongst the yellow Tertiary sands, but in these they are yet to be found. The flints show all the characteristics of the rudest palæolithic age—the archæoliths of the Ponte Molle, the Tor di Quinto, the Monte Sacro, and the Ponte Mammolo are the best proofs. According to Professor W. Boyd-

[1] I say 'Italian' because Professor Busk has identified with the human *fibula* a bone found in clay apparently pre-glacial—this would be the earliest relic of the cave-man.

[2] Ponzi, *Sulle selci tagliati rinvenuti in Roma ad Acquatraversa e Gianicolo*: *Bulletin of Corr. Scient. of Rome*, No. 3, vol. viii., 1870. Cav. de' Rossi expresses his doubts (*Congrès*, pp. 452-3).

Dawkins ('Cave-hunting,' etc.) these ancientest types of hunting and fishing gear have left their representatives amongst the Eskimos, a people still associated with the fauna of the older Pleistocene or Stone Age, the reindeer and the musk-sheep.

III. After the Diluvial sets in the *Glacial Epoch*, the second period of the Quaternary Age. Under the ever-increasing cold the rains become snows; polar ice drifts towards the equator, and the glaciers, Alpine and Apennine, deposit moraine and angular erratic blocks upon the abundant conglomerates of the preceding period. The atmospheric perturbation is accompanied by earthquakes, which open the British and Saint George's Channels, the Straits of Gibraltar, and the Dardanelles; which sever Sicily from its mainland; and which form the Dalmatian Archipelago. Volcanoes, chiefly sub-marine, begin to discharge lavas, mostly absent from the previous formations. The sub-Apennine shallows are gradually elevated into dry land, compelling the Arno to change its course: Monte Pisano sinks, and the central Italian Archipelago becomes a great gulf, in the midst of which the craters of Bolsena, Viterbo, and Bracciano, linearly disposed from north-west to south-east,

vomit the palæo-plutonic tuffs which, in the Roman Campagna and the adjacent parts, overlie the diluvian breccias. The subaërial eruptions partially arrest glacier formation in the Apennines, and allow erratic blocks to be carried beyond the limits of the ice which had stunted and withered the flora, and which had scattered mountain and plain with the corpses of the fauna. A mere remnant of the latter saves itself by emigration; and man, in the acme of his misery, is not wholly destroyed by cold and hunger, those implacable enemies of all life. Wandering in search of shelter he, also, descends to the sub-Apennine hills, and he seeks the caloriferous centres where the radiation of plutonian heat defends him against the rigours of the secular winter. His remains are shown in the worked flakes of silex yielded by the volcanic tuffs of the Campagna di Roma. Shell-implements, carefully cut or chipped, and pierced with a hole for suspension—in fact, knives—have lately been discovered in a diluvial grotto near Les Corbières, on the top of a mountain overhanging the Padern village. This novel fact also suggests that the Rousillon plains from Perpignan to near Estagel once formed part of the sea.

IV. During the *Alluvial Epoch*, the third period

of the Quatenary Age, the cold diminishes, the glaciers shrink towards their former limits, the atmospheric convulsions and the eruptions, both submarine and subaërial, are gradually extinguished; and the sun, piercing the dark fogs and vapours, vivifies and awakens nature. The sea-bottoms, strewn with volcanic deposits, become dry land, and the great river-valleys begin to assume their actual profiles. The fusion of the retreating ice and snow, coursing in immense torrents, transporting vast masses of abraded matter, resetting their sides with *travertino*, and lining their soles with sand, with river-drift, fluvial conglomerates and huge water-rolled blocks, forms deep ravines, and traces broad beds, especially upon the newly-born plains. This action is still distinctly marked in the valleys of the Arno, the Anio and, to mention no others, the Tiber. With the increment of heat there is a counter emigration on a small scale, the remnants of the fauna and flora return to their former seats, whose temperature, however, is still below that of its former average, while the isotherms occasion another geographical distribution of organic beings. A new vegetation supplies abundant food to the animal creation, and man, who has escaped the horrors of the diluvial

and the glacial epochs, quits the mountains and begins to inhabit the plains.

The variety of silex-implements, arrow and lance heads, knives, and axes, preserved in the strata of vegetable earth immediately overlying the oldest volcanic tuffs, proves that, during the alluvial epoch, the palæolithic began to merge into the neolithic age. Signs of civilisation appear in bone (*C. elaphus*) handles, and in fragments of pottery—'sibi primum fecit agrestis pocula.' The quantities of stone weapons found, for instance, at Inviolatella [1] (Campagna di Roma), suggests that these neolithic cave-men—according to some, the earliest Aryan immigrants, who introduced the dog, the goat, the sheep, and the long-fronted bull—either had their manufactories or fought their battles there. To this the Jury ('Congrès,' p. 513) would attribute the Olmo Calvaria, a *calotte* found incrusted with several centimètres of *travertino*. At this period the *Bos primigenius*, the elephant, and the rhinoceros (*tichorrhinos*) were still in the land, showing climacteric conditions which differ from the modern (?).

[1] Ponzi: *Sui manufatti di focaja rinvenuti all' Inviolatella*, etc. *Accad. pontif. dei nuovi Lincei.* Sess. 1, 2 dic. 1866. De' Rossi: *Rapporto sugli studi*, etc., *nel bacino della campagna Romana.* Ann. de l'Inst. de cor. arch., vol. xxxix.

Moreover, it is remarked in Italy that weapons of the second Stone Age outside the stratifications of the great rivers, prove that these had abandoned their gigantic primitive beds. De' Rossi disinterred silex and lava instruments, neolithic arrows, as well as archæoliths, upon the flanks of the great Latial Cone; and in 1866 he made, near the Anio, above Cantelupo (formerly of the Æqui), on the Via Valeria at the mouth of the Ustica valley, which discharges the Digentia rivulet of Horace, the remarkable discovery of regular sepulchres. Two sets of crypts or small galleries, at an upper and lower horizon, hollowed in the *travertino* which had been left dry by the retreat of the Quaternary waters, produced five intact skeletons, distinctly establishing the existence, in the second Stone Age, of the two forms of skull which are still found throughout Italy. The adults of the higher sepulchre, one supine, the other doubled for want of room, were brachycephalic, and, though one was rachitic, both appeared to belong to a short, broad race; amongst the many arrow-piles of grey silex and a fine knife, interred with them, were a coarse and primitive water-pot and a lance-head of fine quartz with amethystine veins. The three underlying dolichocephalic

skeletons, apparently of one family, showed much more delicacy of texture. The bones were not unlike those of modern man : there were neither arms, nor fictiles, but around them and at their feet were found remains, some worked, of the dog, horse, ox, pig, *Cervus elaphus*, and perhaps the reindeer. The memory of the neolithic πέλεκυς was long preserved by the Romans, who, in the Fecial rite derived from the Equicolæ, sacrificed the pig with a stone hatchet, and it became the sign of Thurs, the 'giant,' the third letter in the Runic alphabet. Similarly the Jewish knife used in circumcision was probably a survival of older days.

The Hernician ('mountaineer'?) valley especially became the seat of a powerful and highly-civilised race; and, during the period of quiescence which followed, Latium began to build cities.

During this alluvial epoch the ancient volcanoes are closed by the elevation of the land, which some call the retreat of the sea ; and other subaërial vents open at Tichiena, Pofi, Callame, and other places in the Hernician (Anagni) and Ciminian (Viterbo) valleys. Hence the subterranean fire passes to Latium proper, whose late development of civilisation was probably due to the long evolution of plu-

tonic disturbances. The Latin eruptions are usually distributed into four successive eras, each separated by periods of rest. The first raised the great Latial Cone (Mons Latialis), with its central and apical crater Artemisa, and its ring of auxiliary mouths, represented by Nemi, Vallericcia, Laghetto, Valle Marciana, Gabii, and others, discharging pyroxenic lavas. The second movement appeared at the same places after a period of calm, shown by fossils on the volcano flanks—for instance, at Monte Cavo, which resembles Vesuvius in the Somma Circle. To this or to the subsequent division belongs the discovery of bronze implements,[1] and of stones which, like the Jadeite found near the Sabine Sacco, but not existing in Italy, argue the extension of commerce and emigration.

This also is the period of monoliths, dolmens, mortarless Cyclopean walls, and hydraulic works cut in the rock; and to it we must refer the legends of Picus and Faunus, Saturn and Janus—'those old credulities to nature dear.'

The third eruptive era was apparently limited to opening the Albano crater. It spread around it

[1] We have the testimony of Lucretius that bronze was used before iron; the latter, moreover, was long prescribed in religious ceremonies—for instance, of the Romans.

not vast lava-rivers, but lapilli, scoriæ, and ashes, which, converted by torrents of rain to a muddy paste, were presently solidified into the volcanic conglomerate known as *peperino*. Upon this foundation Alba Longa was subsequently built, and became the capital of the Latin race. At last the craters were changed to rain-pools, and the Alluvial Epoch ended with scattering lakes over the surface of Latium. About this time lacustrine villages were numerous. The Sabines occupied the lands beyond the Anio, and the Etruscans settled north of the Tiber.

V. During the *Recent*, or *Modern*, *Epoch*, following the Post-pleiocene, the temperature becomes what it is now, and the rivers, the miserable remnants of the alluvial giants, shrink to *cunettes* in their huge beds. After many centuries of repose, the fourth and last outbreak in Latium opens the little vent of Monte Pila, on the edge of Monte Cavo. The latter was still in eruption when Romulus was laying the foundations of Rome: Livy (i. 31) mentions, under the reign of the third King, a thick shower of stones, and a heavenly voice sent from the Albano Mount—a prodigy which required a nine-days' festival. The comparatively modern date of

the convulsion is proved by the potteries, and even the libral *æs grave*, discovered, like the cinerary hut-urns, under the volcanic *peperino*. This movement ended in earthquakes, which continue till our day, and in the transference of volcanic tension to the south, where it is now shown by the Phlegræan Fields, Vesuvius, Stromboli, and Etna.

SECTION II.

THE ETRUSCAN MAN.

THE geological sketch of early Italy ended, I would offer a few remarks concerning the successive immigrations into the Italian Peninsula which finally brought the Etruscans—racial movements established either by old traditions or by modern science, especially craniology; and carefully investigated by later writers, especially by Pictet of Geneva, and more recently by Schleicher and Conestabile. It is beyond the scope of these pages to notice the great Mongoloid (?) or Turanian (?) substratum—which Prof. Hunfalvy would prudently call an-Aryan, and which M. Thomas and his numerous school would make superior in culture to the Aryan,[1] every-

[1] I will not attempt to resume the discussion about the origin of 'Aryan.' Some (older school) derive it simply from *ar*, the plough, which seems to have originated in Bactria and Irán; others find many Sanskrit and Zend roots, as *arth*, *ridh*, *rh*, and *r*, meaning noble, worthy, rich, honoured. Again, the Zendavestan tradition assigns to Thraetavna (Indra) three sons, Airya, Caizima (Shem ?), and Tuirya (Tur, Turan). Firdausi (10th century) makes the three races sons of Furaydún, and his Pehlevi 'Irij' (Airja) was the youngest but the steadiest of all.

where met by the intruding family;[1] or to enter into the subject of the Basques, whom Dr. Broca, despite their splendid type, moral as well as physical, would consider autochthonous, and whom Prince Louis Lucien Bonaparte would make, with Humboldt, Grimm, And, and Rask, remote kinsmen of the modern Finns and Uralians. Nor will my list include the modern Skipetar, Albanians whose origin is still a mystery,[2] the Gipsies from the Valley of the Indus, and the Magyars, the latest flood which the East poured into Europe.

Sogdiana and Bactriana—apparently the earliest seats of settled life agriculture and comparative civilisation—appear to have been the cradle of the conquering race whose dispersion throughout the furthest regions of the West was accomplished before the tenth century B.C.; and the following are the four successive waves whose influx is admitted by modern anthropologists:—

I. The *Kelts* first left the family home; the

[1] It is still uncertain whether the first neolithic cave-men were of Iberian, Mongoloid, or Aryan stock.

[2] Perhaps the most mysterious part of their language is the way in which it explains the oldest Greek terms (Fallmerayer: *das Albane Elem. in Griechenland*). Plutarch says that 'swift-footed' was 'Αετέτε in the dialect of Epirus: it is still Chpéte in the tongue of the Tosks or Southerns, and Shpéte amongst the Gheghs or Northerns.

ethnologic law declaring those tribes to be the oldest who have been driven to the extremities of continents:—the voice of all history is in favour of their superior antiquity. They are supposed to have taken the direction of ancient Hyrcania; to have passed south and west of the Caspian, as they planted colonies in the Caucasian Albania and Iberia; and to have entered Europe, of course by land, *viâ* the southern shores of the Black Sea and the Danube Valley. Thence they spread westward far and wide; they occupied, in historical ages, Western Austria, Northern Italy, the broad lands afterwards called Gaul, the Pyrenean countries, and the British Islands. This race is supposed to have brought with it the neolithic Stone Age and its constant accompaniment, pottery. We can hardly assign the movement to a date later than thirty centuries B.C.[1]

II. The *Aryo-Pelasgi* are supposed to have emigrated either at the same time as, or shortly after, the Kelts, and they followed the same line, by Ariana and Parthia, but a little to the south; this is shown by their traces in Asia Minor and on the Ægean, the

[1] The wide extension of the race justifies Pelloutier (*Hist. des Celtes*, p. 10), who, like the 'Ulster King-at-Arms' ('Etruria Celtica'), is generally ridiculed for seeing Kelts everywhere.

Hellespont, and Propontis, till, travelling by land, they reached the Mediterranean shores, Greece, Thrace, Illyria, and Italy, as far as the Alps, where they mingled with the Keltic Gauls.[1] This second emigration would continue till the fifteenth century B.C.

III. The *Scandinavo-Teuton* appears much later in history, which, of course, ignores his first coming. The group may be divided into two distinct sections, the former being judged more ancient, for the same reason as the Kelts, namely, having been pushed further west by subsequent invaders; but the similarity, amounting almost to identity, of physique, temperament, character, and even language, shows them to be brothers rather than cousins. They are supposed to have turned north of the Aral Lake and the Caspian—the negative proof being that there are no remains of them to the south—to have extended over Scythia and Sarmatia, the land of the Slavs, and to have entered Europe *viâ* the upper Danube and the Rhine. Hence they extended to the Baltic and to where the North Cape prevented further progress. This was

[1] Mr. Edward A. Freeman, judging from the similarity of the Latin and Greek tongues, would make these cognate families of Aryans 'branch off from the original stock as one swarm (?) and part, most probably, (?) at the head of the Adriatic Gulf.'

the noble barbarian blood which overran the declining Roman Empire.

IV. The *Lithuano-Slavs*, the last great wave, passed by Asiatic Sarmatia, crossed the Volga, and occupied the eastern parts of the European Continent, where population was thinnest. Their ninety millions still hold nearly half of it, being limited by a meridional line, connecting the western extremities of the Baltic with the Adriatic, bounding the Scandinavo-Teutons on the south and east, as these bound the Kelts; and they are preponderant in Old Prussia, Lithuania, Russia and European Turkey; in parts of Hungary; in Bohemia, and in the Eastern regions of Austria. As the Latin race is of the Past, so the glories and triumphs in arts and arms await the Future of the youngest member of the family—it is, perhaps, the most interesting, when we think not of what it has been, but of what it will be. This emigration appears in history about the third and fourth centuries A.D.; and the Sarmatian words, Hun, Geloni, and Sciri, or Scirri, have given a terrible significance to the modern Scythian. But we may fairly doubt this movement of the Slavs. The learned Fortis has detected not a few Slav roots in the names of regions and cities preserved by the Roman biographers and

historians of Dalmatia; and the Eneti or Veneti of the Baltic, who, distinct from the Euganeans,[1] named Venice, and whom Mommsen suggests may be Illyrians or Albanians, are still preserved in the Wenden of adjoining Styria, popularly known as Slovenes. This would denote the presence of the Slavs in Southern Europe many centuries before the date usually assigned to them: the question is highly interesting, but here our business is with the second, not the fourth, member of the family.

The first wave of the Aryo-Pelasgi may have displaced the palæolithic peoples to whom many attribute such archaic titles of the Tiber as Albula, Rumon, and Serra. These were the Fauns and Satyrs, the Caci and Cyclopes, the nymphs and dryads of a subsequent mythology: here we find the *terræ filii*, the aborigines of the classics,

Gensque virum truncis et duro robore natum.

The earliest families would be the Iapyges of Apulia; the old Italian or Messapian coast, now the Calabrias; the Ausones and the Opici,[2] Obsci, or Osci,

[1] The brachycephalic Euganeo-Veneti are generally reputed Illyrians or Illyrio-Greeks (the brachycephalic Albanians ?). Grotefend (*Zur Geographie von Alt-Italien.* Hanover, 1840–2) would derive the Italic aborigines from Illyria—which, to say the least, is not proven.

[2] Thucydides (vi. 2). On this Prof. Calori remarks: (*loc. cit.* p. 19)

who drove into Sicily the Siculi of Central Italy and the other kindred tribes of Lucania and Campania —in fact, those thrust into the extremities of the Peninsula by subsequent invaders. They found the mysterious Ligurians who occupied, not only modern Liguria as far south as the Tiber, but also the greater part of Italy, and who apparently extended for considerable distances northwards and north-westwards, to parts of France and even into Spain. The Ligurian type of brachycephalic skull is found, not only in the Certosa, but at Torre della Maina in the Modenese (Calori and Nicolucci: 'La stirpe Ligure in Italia ne' tempi antichi e moderni.' Atti del' Accad. delle Scienze di Napoli, i. 1865). The author holds that this race, cognate with the Iberians and the Siculi, occupied the greater part of Italy.

The second great influx is that of the Umbrians and the Prisci Latini, forming the 'groupe Italiote' of Mommsen. The former rounding the head of the Adriatic and penetrating into the Apennines, occupied Tuscany (Dion. Hal. i. 19), the region between the Alps and the Apennines—in fact, the eastern lowlands of Italy. The Volsci,

'Per Opici non si devono intendere gli Oschi soli, ma i terrigeni od originarii italici, da Ope terra.' Philistus in Dion. (i. 22) declares that the occupants of Sicily were Ligurians, led by Siculus, son of Italus.

Samnites, and Sabines, the Æqui and Campani (*antiquissimus populus*, Pliny and Florus) were branches of this tree, and it can hardly date after the twentieth century B.C. The Latins, who appeared about the same time as, or a little after, the Umbri, taking the westward line after leaving Lombardy, established themselves on the occidental lowlands of Latium, upon the basin of the Tiber, where the marshes and lagoons of that age permitted, and perhaps in Campania, the lands of the Opici. These tribes, marching by land, must consequently have passed through Venetia, Lombardy, Emilia, and Romagna, doubtless leaving scattered settlements *en route*, for the course of history was not so regular as it appears on paper. All had a knowledge of metals, certainly of bronze, and, perhaps, except the earliest, of iron: this fact we find in the pre-historic *terramare* or *mariere*, the kitchen-middens and the pile-villages.

The Umbro-Latins were shortly followed by the earliest maritime emigration that of the Græco-Pelasgi, which poured into Italy *viâ* Arcadia, Thessaly, and especially Epirus (Albania). They settled themselves in Magna Græcia, containing Iapygia (Apulia), Italia Proper (the Calabrias), and Œnotria

(Lucania). By degrees these three great groups, marching over as many several routes to the centre of the Italic Peninsula, conquered, by arts rather than arms, the Ligurians, and the *vividus Umber,* including his Sabine, Samnite, and other kinsmen,[1] together with the Prisci Latini; extended themselves into Tuscany and the Padan valley, where their earliest settlement was known as Spina; and reduced to Pelasgian rule all the choicest regions east of the modern Lamone or Santerno River. Their empire, characterised by its Cyclopean or Pelasgian constructions, must be held to begin with the fifteenth or even the seventeenth century B.C.; and its decadence, which might have arisen from cosmical causes, earthquakes and eruptions, is related by history with fables and supernaturalisms which, superficially considered, have made the name of Pelasgi sound quasi-mythical—'like the knights-errant of the Round Table.' And yet there is no

[1] 'Nam Umbria pars Tusciæ est,' says Servius (*ad Æn.* xii. 753); and Strabo (v. 1) informs us that before Rome rose to power the Umbri and the Tyrrheni fought for supremacy. Pliny (iii. 8) tells us: 'Umbro (the modern Ombrone river which bisects Tuscany) navigiorum capax et ab eo tractus Umbriæ portusque Telamon.' Again: 'Etruria est ab amne Macra.' Solinus, Servius, and Isidore report: 'Veterum Gallorum Umbros propaginem esse,' and the former would derive the name 'ab imbribus.'

people concerning whom the voice of antiquity speaks with a clearer or a surer sound.[1]

The decay of the Græco-Pelasgi was followed by the emigration of the Pelasgo-Tyrrhenians,[2] the Lydians, or Mæonians, from Asia Minor, which still kept up its connection with Greece and Italy. The Turscha, Turs'a, Tuirs'a, and Turis'a of the Egyptian annals, the *acerrimi Tusci* of Virgil, are supposed to have come by sea about the fourteenth century B.C., and they occupied, as a great military power, the central peninsula with 300 *oppida* (Pliny, iii. 14), raising themselves upon the ruins of the former races. They are generally believed to have first founded the Tyrrhenian Federation of the west, 'Etruria Madre,' and to have crossed the Apennines and occupied the Circumpadan regions, 'Etruria Nova,' as far as the Alps (Herod. 'Clio,' 94), and, lastly, Etruria Campania or Opicia, in the twelfth or, perhaps, in

[1] Herodotus, Diodorus Siculus, Dionysius Halicarnassus, Virgil and his commentators (Servius), Strabo (especially, v. 1), Pliny, Pausanias, Silius Italicus, 'e non pochi moderni fino alla noja.' The tradition of the three streams is preserved in the names of Iapyx, Daunus, and Peucetius, the three sons of the Illyrian king Lycaon.

[2] Pliny (iii. 8): 'Umbros, inde exegere antiquitus Pelasgi, hos Lydii.' Dionysius Hal. (*Antiq. Rom.* i. 20) tells us that the Pelasgi, uniting with the aborigines, took Umbrian Crotona and used it as an *arx* and a defence against its former owners.

the thirteenth century B.C.[1] This would be about the date of the Trojan war (popularly B.C. 1184), and some four centuries before Rome was built. But the superior antiquity of the Rhœto-Etruscan alphabet, the rarity of Felsinean inscriptions observed in almost every tomb of Middle Etruria, and the archaic finds of the Tyrol and Bolognese territories, may suggest that emigrations by land, and perhaps settlements, accompanied, or even preceded, the sea voyages; hence, possibly, the north-eastern was the most sacred quarter to the Etruscans. These peoples brought with them the Phœnico-Greek alphabet, and applied it to the dialect peculiar to or adopted by them. Thus the learned Corssen ('Die Sprache der Etrusker') finds that the Etruscan alphabets form three groups—Common, Campanian, and Northern—whilst each has some peculiar letters, and others similar in form, but different in sense. They are closely related to the oldest Greek of the peninsula (Cumæ and Neapolis), and this, again, is the same as used by the Chalcidian colonies of Sicily. They had learned the use of tin in the Caucasian regions, which supplied Egypt:

[1] Varro (*De Die Natali*, cap. 17) says 450 years before Rome was founded. Niebuhr (i. 138) also carries back the first Etruscan *sæculum* to B.C. 1188, or 434 years A.U.C.

the mines next worked were in Spain, and lastly came the Kassiterides, with which the Phœnicians had traded, probably during the domination of the Shepherd-kings, the Syro-Aramæan Bedawi invaders of Egypt, typified by Abraham and Lot, between the twenty-first and the seventeenth centuries before our era. The Etruscan rule, which, in the fifth and sixth centuries B.C., embraced nearly all Italy, lasted—with the interval of conquest by the Kymric Boii in B.C. 396[1]—till B.C. 281, and its dialect till B.C. 202; thus the life of the nation ranged between nine hundred and a thousand years.

[1] The legend says that on the same day Veii was taken by the Romans.

SECTION III.

CRANIOLOGY.

THE collection of skulls exhibited at the Congress of 1871 was in no wise remarkable except for its poverty. The principal contribution of the palæolithic (post-Pleiocene) age was the (Colle del) 'Olmo skull' from near Arezzo, now in the Royal Museum of Natural History, Florence: this calvaria or *calotte* was, as I have said, found in the diluvial *travertino*. The (Isola del) 'Liri skull,' also dolichocephalous, and probably synchronous, was discovered in sand under a stratum of the same concretionary deposit, 80 centimètres in thickness. The cubic contents of the latter are laid down at only 1,306 cubic centimètres (=79·701 cubic inches), showing a brain of 1,156 grammes (= 2 lbs. 8·78 oz.); and the likeness to the Engis skull has been generally remarked. The neolithic specimens were more abundant. Two skulls from the Monte Tignoso cave, near Leghorn—one exceedingly brachycephalic (ceph. ind. 92), the other

very dolichocephalic (c. i. 71)[1]—show, during the second Stone Age, the existence of the two distinct types still characterising the Italian race. It is an observation generally made that the modern peoples of upper Italy are mostly short-headed, and the southerners long-headed, whilst the two forms blend in the Island of Elba, in modern Umbria, and in the Province of Rome, where, however, the brachycephalic is said to be waxing rarer.

The Tignoso skulls are both small, with restricted, depressed, and narrow frontal regions, and exaggerated occiputs. Two brachycephalic skulls from the Grotta di Castello, on the Monte Pisano, beyond the Serchio, greatly resembled them, although only the *calvariæ* remained. A third pair, from the neo-

[1] Dr. Paul Broca, the learned Secretary of the Anthropological Society of Paris (p. 398, *Sur la Classification et la Nomenclature Céphaliques, &c., Revue d'Anthropologie*, established five several groups :—

	Cephalic Index.	Simple Fractions.
1. Dolichocephals :—		
True Dolichocephals,	75 : 100 and below =	$\frac{3}{4}$ or $\frac{6}{8}$.
Sub-Dolicocephals,	from 75·01 : 100 to 77·00 =	$\frac{7}{9}$.
2. Mesaticephals,	from 77·78 : 100 to 80·000 =	$\frac{4}{5}$ or $\frac{8}{10}$.
3. Brachycephals :—		
Sub-Brachy.,	from 80·01 : 100 to 83·33 =	$\frac{5}{6}$ or $\frac{10}{12}$.
True Brachy.,	all above 83·33.	

It is rare, he tells us, that the mean cephalic index of a race, not including its deformities, natural or artificial, descends to 71 or rises to 87, thus giving an *écart* of 16 ; the normal extremes being respectively 65 and 92 (= 27).

lithic Caverna della Matta, fortunately had lower jaws: one was of the dolichocephalic division (c. i. 68), very long, and flattened at the sides, a type found in Sardinia, but rarely on the adjacent continent: the other was of the marked brachycephalic or Ligurian type (c. i. 84). To the latter people probably belonged the cannibals of the Palmaria Island in the Gulf of Spezia: their remains have been ably described ('Grotta de' Colombi') by Professor Giovanni Capellini, a native of that place, who, at the early age of 34, has risen to be Rector of the venerable University of Bologna. He it was who conceived the idea of the Congress of Bologna, who has taken a leading part at every meeting of the kind, and who had the moral courage to declare his belief ('L'Antropofagismo in Italia all' Epoca della pietra,' 'Gazzetta dell' Emilia,' no. 11, 1869) in the universal prevalence of cannibalism, and who consequently was long regarded, with the usual inconsequence, as little better than a cannibal himself. I am pleased to find in this *savant*, as in my distinguished friend, the anthropologist Professor Carl Vogt, such efficient support for the theory which I formed and published many years ago. It is still my conviction that anthrophagy has,

like polygamy and slavery, belonged to all peoples at some epoch of their history; that cannibalism, like both the so-called 'patriarchal institutions,' not only satisfied physical wants, but led to moral progress; that human sacrifice ending in bestial sacrifice, which in turn has yielded place to the 'bloodless sacrifice;' and thus that it was not only beneficial to the state of society which recorded it, but it has also tended to the progress and the development of mankind.

The only specimens of the Bronze Epoch were three skulls discovered in a sepulchral cave of Monte Calamita (Elba); and they were described by Professor Vogt ('Di alcuni antichi crani rinvenuti in Italia.') Those of the *terramare* of the Emilia, also bronze, have not been found; but the kitchen-middens of Modenese Gorzano yielded two of Ligurian type, probably buried in subsequent times.

Most of these skulls and other synchronous finds (e.g. the brachycephalic Mezzana Corte, etc.) have been commented upon by Cav. Dott. Giustiniano Nicolucci, the well-known craniologist, and the accomplished author of the volume 'Delle Razze Umane.' According to him ('L'homme pré-historique en Italie,' 'Congrès,' pp. 233–238), this palæo-

lithic or early Quaternary man represented the original and primitive type of the actual Italian races. The cranium, here short, there long, was of small capacity and solid thickness; the form was an ogival arch spreading out posteriorly; the frontal region was low, narrow, and retreating, with prominent and even connecting *glabellæ;* and an external crest, with a corresponding internal channel, ran from the mid-forehead to the centre of the sagittal suture, whilst the foramen magnum abnormally approached the occiput. As the lower maxillæ are wanting in the earliest specimens, it cannot safely be determined whether the race was prognathic or orthognathic; but the strongly-marked attachments for muscles show vigour accompanying short stature.

In the earlier neolithic age, as we see by the two skulls from Cantalupo Mandela, near Rome, there is considerable improvement; the crania, both long and short, are less thick; the temporal region is higher, straighter, and broader, the great foramen is nearer the axis, and the posterior as well as the anterior divisions are better proportioned. The capacity and the contents, which in the Quaternary Liri skull were 1,306 c. c., and 1,156 grammes now

become 1,408 c. c. (=85·926 cubic inches) and 1,245 grammes (=2 lbs. 11·91 ounces). Both the skulls above specified have a slight maxillary prognathism, corrected, however, by the position of the teeth, which are set vertically in the alveoli, and we have reason to believe that the whole body had followed the progress of the head.

In the Bronze Age, as we see by the skulls from Torre della Maina and from Elba (Æthalia, Ilva, an Etrurian State, according to Virgil, x. 173), the process of development is not arrested; the bones again become thinner, the capacity is 1,500 c. c. (=91·540 c. c. i.), and the contents 1,326 grammes (=2 lbs. 14·78 oz.); about the same, in all three points, as in the modern man. Lastly, the Age of Iron shows the greatest removal from the Quaternary peoples; and the types begin to distribute themselves into those of the modern Italian areas, with modifications arising only from cosmic conditions and mixture of blood.

At the Congress, Count Gozzadini exhibited a valuable series of 26 skulls, two from Villanova and 24 from Marzabotto. Two of the former were prognathous, possibly distorted by pressure; most of the latter were fragmentary, and all showed brachy-

cephalism as well as dolichocephalism. Prof. Nicolucci (*Sui cranii rinvenuti nella Necropoli di Marzabotto e di Villanova*), who recognised the two types, the dolichocephalic being 63 to 37 of the other, having compared one cranium from Villanova and three from Marzabotto with undoubted Etruscan specimens (in his *Antropologia dell' Etruria*: Naples, 1869) decided that the four former were non-Etruscan. Having also failed, after equal study, to detect any affinities with the Kelts of Cisalpine Gaul; he therefore concluded that they belong to the men still holding Bolognese ground, that is, to the Italic Umbri. This well-known anthropologist, whose opinions carry great weight, defended his Umbrian theory in two letters addressed to Count Gozzadini, against the Etrusco-Ligurian ideas of Prof. Carl Vogt. The latter had judged a skull from Villanova to be of Etruscan type, whilst he attributed those of Marzabotto to the Ligurians ('Sur quelques Crânes antiques trouvés en Italie,' 'Bulletin de la Soc. Anthrop. de Paris,' tom. i., série 2, fasc. 1); but he also persisted, with Lagneau, in reviving the old theory of Baer (1839) *versus* Andreas Retzius (1842), that the Etruscans were dolichocephals. Prof. Nicolucci's theory is dis

cussed by the learned Cav. Dott. Antonio Garbiglietti, one of the first to call the attention of anthropologists to the peculiarities of Etruscan type (p. 39, *Sopra alcuni recenti scritti di craniologia etnografica* dei Dottori G. Nicolucci e J. Barnard Davis: Torino, tip. Favale, 1866). The learned Professor Cav. Alberto Gamba (*Special Report to the Royal Academy of Medicine, Turin*), after honourably mentioning his brother anthropologist, declares 'di non potere abbracciare in modo assoluto l'opinione del Nicolucci, e ciò perchè la differenza di forma, di proporzione e di misure che i cranii Etruschi e quelli di Marzabotto e Villanova non sono abbastanza pronunziati per dichiarare questi ultimi di stirpe più moderna.' After offering reasons for this conclusion, he adds: 'Se noi osserviamo lo specchietto dall' illustre dott. Nicolucci presentato, noi vediamo che i cranii di Marzabotto e Villanova appartengono ad una stirpe differente perfettamente dalla Celtica, e la differenza sta principalmente nella forma, o tipo generale del cranio. Ma se osserviamo le differenze dal Nicolucci notate fra i due cranii di Villanova e Marzabotto e quelli Etruschi, io vi confesso ingenuamente, di non poterne sottoscrivere la sentenza di separazione, nè di epoca storica, nè di stirpe.' He

thus pronounces all to be of the same race, guarding himself, however, by noting the insufficient number which had come under his observation; and finally, he offers a wise caution concerning the difficulty of determining the characteristics that distinguish the Etruscan cranium. A people which emigrated from three different regions at various eras not determined by history and which mingled with four older races, the Umbri, the Ligurians, the Osci, and the Iapygian Volsci, perhaps even with the Cisalpine Kelto-Galli, cannot have acquired the racial type of cranium without passing through centuries of change and the progressive development of pacific institutions. He would therefore hold as characteristic only the crania of the Twelve Cities of Middle Etruria during their most flourishing period 500 to 400 B.C.

On the other hand, Professors P. Montegazza ('Congrès,' p. 239) and A. Zannetti (p. 166, *Studi sui crani Etruschi. Arch. per l'Antrop. e la Etno.*: Florence, 1871) compare, and find a resemblance between, the Villanova and Marzabotto skulls and those of Chiusi, Tarquinii, and well-known Etruscan centres. But the former denies, in the present obscurity of Italian ethnography, the right

of giving scientific definitions to the racial elements which we call Umbrian, Etruscan, Roman. He cites the case of Sardinia, where he made a fine collection, and which he carefully visited, not neglecting even the smaller villages. Popular scientific opinion divides the island into two zones, Latin in the north; in the south Arab, or rather Semitic: yet he observed, without noticing other secondary elements, such as Siculi, Catalans, and others, a distinctly Egyptian type, which extends even to the neighbouring *terra firma*; whilst the peasantry of the Cannobina Valley retain the characteristics of its old colonists, the Romans. Prof. Montegazza especially denies our ability to deduce, in the actual state of science, the intellectual hierarchy of the brain from the shape or size of the skull which contained it, and he concludes with the sensible observation: 'Ou s'introduit la passion, la vérité se cache la figure de ses deux mains.'

Not a few have attempted to prove, I have said, that the Boian conquerors buried their dead in the same cemeteries with the Etruscan. This 'funereal infiltration' is generally rejected; although the shapes of the swords, the forms of certain objects of luxury, and even the mode of burial,

seem to prove an interchange or a reciprocity of ideas between the Etruscans and the Gauls.

The 'Thesaurus Craniorum' (London, 1867) of my learned correspondent Dr. J. Barnard Davis, a work of which I am glad to say that a Supplement has been issued, contains a description of one Oscan and of two Etruscan *calvariæ*. The former is quasi-brachycephalic, and the very narrow forehead is a striking contrast with the typical Roman. Of the latter pair, one (No. 769) was found at Villanova; unfortunately, it is imperfect: the second is by far the finest of the three (No. 1,173, p. 85, accompanying the Etruscan inscription). This large *calvarium* of a young woman, exhumed in 1857 near Perugia, is exceedingly like an ancient Roman skull. The author records also the remarks of Professor L. Calori, which are principally directed to oppose the impression, derived from certain cases of prognathism, that the Etruscans were allied to the Ethiopic races, and cites Dr. Antonio Garbiglietti's study of an Etruscan skull, which exhibits on both sides the singularity of a suture running along the lower edge of the *os jugale*, and dividing the bone into two portions. Regarding Professor Calori's 'Phœnician Origin of the Etruscans'—I shall have

more to say of it—Dr. Barnard Davis considers that the opinion of such a competent and thoroughly honest investigator deserves every consideration. The author of the 'Thesaurus,' however, has one good example of an ancient Phœnician skull (No. 1,174, p. 86) from Sardinia, and he seems to think that it does not agree very closely with the ancient Etruscan. He mentions the fact that Dr. G. Nicolucci, who described and figured the skulls in the Museum of Antiquities, Cagliari, classed them with those of the Semites — Arabs and Jews. Finally, he has an Oscan skull (No. 1,049, p. 84) from Nola, strikingly distinguished from the Roman by the narrowness of the frontal region.

SECTION IV.

PROFESSOR CALORI.

In order to interview the Etruscan, a visit should be paid to the learned anatomist and naturalist Prof. Commendatore Luigi Calori, whose published works require no quotation, whilst his kind and genial reception encourages even the 'profane'—in the Latin and Italian sense of the word. His study, behind the theatre where he lectures, contains 19 old Etruscan skulls, and he will at once point out their resemblance with the 'massive and grandiose Roman *calvaria.*' The chief points of similarity are the semicircular lines of the temples; the harmony of the zygomatic arches, and the pronounced angular sinus between the nose and the frontal bone; the great development of the superciliary arches; the square, horizontal orbits; the posterior position of the auditory *meatus*; the greater bi-parietal diameter; the heavy mandible; and, finally, the strong attachments of the muscles. Most of these

crania are dolichocephalic; one is decidedly brachycephalic as a German. The bones vary from the very massive to the remarkably thin, and the first points which struck me were the shortness of the lower bi-temporal diameter, the long square face, and the flatness or compression of the parietes, which every traveller remarks in the Bedawin, the flower of the Semitic race. Compared with the valuable series of Umbrians in the Museum of Natural History, and with another assortment not yet prepared for exhibition, the Etruscans assert themselves as the 'rerum domini,' and they give to the 'vividus Umber' the mild aspect of a vassal wanting animal force, the prime requirement of an imperial race.

Prof. Calori has given a detailed account of 28 skulls in his folio of 169 pages. It is abundantly illustrated by 17 tables, with the skulls reduced throughout the atlas to half-lengths and quarter-sizes. The lithographs, by C. Bettini, are sightly and artistic. The volume is entitled 'Della Stirpe che ha popolato l'antica Necropoli alla Certosa di Bologna e delle genti affini: Discorso Storico-Antropologico': Bologna, tipi Gamberini e Parmeggiani, 1873. Of this magnificent work, 're-

markable for its material execution,' only 62 copies were printed, at the expense of the City of Bologna; and Dr. Barnard Davis, who was, like myself, fortunate enough to receive a copy, inserted a short notice of it in 'Anthropologia' (No. 1, pp. 104–5). Needless to say this *édition de luxe* should be followed by a popular one.

Thirty-five pages (pp. 28–62, chap. iv.) are allotted to the questions, 'Chi fossero gli Etruschi, donde, quando e come venissero in Italia?' and the answers are peculiarly unsatisfactory. The learned anthropologist examines and rejects the Lydian or Mæonian legend related to Herodotus, concerning the Tyrrheni taking ship at Smyrna. This theory has lately been revived by travels in Lycia, Phrygia, and other parts of Asia Minor; but it relies mainly upon superficial resemblances of dress and ornaments, of games and other customs, and of architecture, and ancient monuments, as the Sardis Mound, the tomb of Porsenna (Chiusi), and the Cucumella of Vulci. Glancing at the Pelasgic origin assigned by Hellanicus Lesbius, he notices at some length the terriginous theory of Dion Halicarnassus, the profoundest writer on Italic subjects. The latter, in contradiction to the general consensus of

antiquity, twenty-two classical authorities, denies the Lydian legend, because Xanthus, a Greek of Sardis and nearly contemporary with Herodotus, was silent upon the subject; and because the Rasenna[1] of his day 'do not use the same language as the Lydians, nor do they worship the same gods, nor resemble them in their manners and customs.' But these are negative proofs. Strabo, the contemporary of the Halicarnassian, assures us that the Lydian tongue had died out of Lydia; and we may reasonably conclude that, after distant wanderings, and the Italianisation of a thousand years, the Etruscans might greatly modify, in fact almost change, their faith and their social habits. Nor must we forget that the Etruscans declared consanguinity with Sardis on the ground of an early colonisation of Etruria by the Lydians (Tacit. 'Ann.' iv. 55). I see, therefore, no reason why we should reject the Lydian origin, or even the derivation of Tyrrhene from Tyrrha, the Lydian Torrha (Müller, 'Etrusk.' Einl. ii. 1).

[1] Rasne and Resne have been found on Etruscan urns (Dennis, i., xxxii.). The late Dr. Hincks identified in the Perugian inscription *Tesne Rasne* with 'Etruscan land'; *cei* with 'and,' and *tesnteis* with 'inhabitants.' As yet no Græco-Etruscan bilingual inscription has been discovered.

The Professor finds analogies with Egypt, as we might expect from the records of the 'Tursha' invader. The three Etrurian Federations of Twelve Cities suggest that of Lower Egypt, which had Memphis for capital; but this is also found in the Twelve of the Achæan League. He then examines the religion, apparently a pantheistic and polytheistic naturalism, composed of three orders of gods, one of immortals and the rest mortal. The first were the 'Dii superiores et involuti,' the *pene nihil* of St. Augustine, the primitive Matter (Hebrew, *Bohu*; Egyptian, *Mut*), which, uniting with generative force (Ba'al, Amon, or Kem), the *nisus formativus*, became *Natura naturans*, whence *Natura naturata*. These mysterious deities begat the *consentes* or *complices*—so called because they are born and die together—the 'conciliarii ac principes summi Jovis.' This working committee of Twelve, like the Triad of the Brahmans and the Greeks, and the Duad of the Persians, contained six males and six females, the 'Saktis' symbolising, in the faith of India, Active Energy. Lastly, from these twelve emanate the Genii, whom the Professor compares with the *Vishwadevas* of the Hindús, and whose action is good (*Penates* and *Lares*), bad (*Larvæ*), and indifferent (*Lemures*,

Lasæ, and *Manes* or ghosts) : they may be reduced to the dualistic form of beneficent and malevolent Genii, superintended by Jove and Vejovis, Hormuzd and Ahriman. Thus he deduces an Egypto-Phœnician or simply a Phœnician system ; and, quoting Seneca, 'Tuscos Asia sibi vindicat,' he opines the Rasenna to be Aryans who had adopted a Semitic creed.

I would here remark that while the cosmogony of the Etruscans is Asiatic, the vast scheme of their religion, numbering upwards of 200 gods and supernaturals, connects them with Persia, with India, and even with Greece. Moreover, they appear not to ignore the creative Deity, the Demiurgos of the cosmic system of Genesis. Their 'Æsar,' translated by all classical authorities 'Deus,' would be the finial of the temple of faith, but the monotheistic element is, as usual in polytheisms, kept out of sight. 'Speak not of God to the mob,' said the Pythagorean ; whereas Moses took the Deity out of the hands of the priests, and made the idea the property of the world. I have elsewhere noticed how a notion of unity underlies the idolatry of polytheistic peoples in Asia, and even in savage Africa ; and, judging by the analogy of the former

with the civilisation of Egypt and Assyria, Greece and Rome, I have little doubt that it was universal. Here, therefore, despite the professional flavour of the passage, I will not join issue with him who says: 'We may take comfort in the thought that the Heavenly Father, whom they (the Turanians) ignorantly reverenced, did not leave them without some faint witness of Himself, but dimly guided them to a glimmering knowledge of the Eternal Goodness, and gave them also, in their darkness, the solace of that blessed hope of immortality which is the stay and refuge of the Christian life.'

The language is then touched upon, with results as meagre. Our author notices the several theories: the Semitic (Hebrew and Chaldee) of Janelli, Tarquini, and Stickel; the Iberian, or Basque; the Keltiberian; the Keltic (*Etruria Celtica* of Sir W. Betham); the Teutono-Gothic (Bardetti, Durandi, Bruce Whyte, and Dr. Donaldson, in his 'Varronianus'),[1] and the high German or Gothic of Lord Crawford and Balcarres. The last-mentioned author (*Etruscan Inscriptions Analysed, Translated, and Commented upon*: Murray, 1873), makes the

[1] He judges it, however, Pelasgian corrupted by Umbrian, and mixed with the oldest Low German (Scandinavian).

sequence Japhetan, Aryan, and Teutonic, and identifies the Tyrrhenoi, not with 'High Dutch,' but with the Tervingi or Visi-Goths, the Thuringi of Central Germany, and the Tyrki of Scandinavia. Furthermore, we have the Slav (Volensky); the Armenian (Robert Ellis, B.D., *Peruvia Scythica*, Trübner, 1875); the Sanskrit (Bertani); the Græco-Umbrian (Lepsius); the Rhæto-Romansch [1] (Steub, 1843); the 'Indo-European' (Prichard); the Archaic Greek (Gori and Lanzi); and, finally, the Aryo-Italic (Mommsen, Conestabile, Fabretti, and Corssen, *Ueber die Sprache der Etrusker*, 2 vols. Leipzig 1874), like the Oscan, Umbrian, Euganean, and other rude dialects of the ancient peninsula—this theory supports the Italic origin of Dion. Halicarnassus (Micali). After many modest professions of incompetence, our Professor ends (p. 56) with opining that 'i Fenici' were the ancestry of the Etruscans, and he complicates the question by considerations of descent from Ham and Shem, which

[1] In the cognate Euganean tongue, whose alphabet is considered the oldest of the three Etrurias by Prof. Corssen, and most like the Carthaginian, Count Giovanni of Schio points out the thoroughly Aryan words *mi* (I), *eka* or *ekka* (*hic*), *suthi* (*sum*), and *cerus manus* = *Creator Bonus*, the former from the root 'Kar,' doing or making, the latter recognised as the opposite of the Latin *immanis*.

are somewhat old-fashioned in these days. He also finds the Phœnicians in Sardinia and Sicily, perhaps in Corsica and Illyria; he traces them to Western Italy, as at 'Punicum,' in the territory of 'Agylla,'[1] as the Phœnicians called Cære; in Rusellæ, from Rosh-El, head (-land) of God, and in Telamon (Tell-Amún), the Hill of Ammon. This is far from convincing. Niebuhr says: 'People feel an extraordinary curiosity to discover the Etruscan language,' and adds that 'he would give a considerable part of his worldly means as a prize if it were discovered; for an entirely new light would then be spread over the ethnography of ancient Italy.' The want, I fear, is far from being satisfied.

But we may attribute some importance to the general aspect of Etruscan civilisation, its immense superiority to that of the peninsula generally, and its difference, not only in degree, but in kind, from the social condition of the old Italic races. Their cosmogony is evidently Genesitic; while their zodiac and their astronomy, which could fix the tropical year at 365d. 5h. 40m., and their architecture,

[1] Mommsen makes Agylla Punic and Semitic. Mr. Isaac Taylor (p. 347) wonderfully derives it from Osmanli *awlu*, a court, and *eyl* (or *il*), a country, as in Rum-Elia, the land of the Rumi.

especially the Doric, which we know to be Egyptian; the winged goddess; the modified sphinx, the eagle-banner, and a host of other Nilotica, must have come, not from Italy, then barbarous, but from civilized Mizraim or Chaldæa.

For the date of the Etruscan emigration we have the suggestion, that it might have begun about the seventeenth century B.C., when Semiramis, the *Imperatrice di molte favelle*, had overrun the so-called Holy Land, Egypt, and Ethiopia (B.C. 1975). The incursions of Joshua, son of Nun, into 'Canaan' (B.C. 1451) may also, as legend informs us, have tended to scatter other Tyrian and Sidonian colonies over the western world.

Professor Calori declares (p. 64) that the anthropologist must not found his theories upon legend and language; he studies the crania and the skeletons of extinct races, and thus he raises his own edifice with a secondary regard for history and linguistic deductions. Our anthropologist supports, on the whole, Professor Nicolucci's Phœnician type of Etruscan craniology, for which that distinguished student supplies some points of resemblance. Yet he hesitates to pronounce an opinion, remembering that the race was probably anything

but pure at the time when it left its Asiatic home; in fact, he does not, after the fashion of certain other writers, offer himself as Œdipus to the Etruscan sphinx.

We now come to the most valuable part of the volume (pp. 65 to 161), the technical description and comparison of the skulls, Umbrian,[1] Etruscan, and Felsinean (from the Certosa), which are compared with those of many other races, Phœnician, Jewish, Keltic, and modern—unhappily the Boii or Lingones are absent. The dichotomic classification of Retzius is adopted. Crania with a cephalic index of 80 and more are brachycephalic, below 80 they are dolichocephalic;[2] and the various subdivisions, as orthocephalic or transitional, mesati or mesocephalic, sub-dolichocephalic, and sub-brachycephalic are ignored, except in the concluding remarks

[1] Dr. Paul Broca prefers *les Ombres* (Umbrians) for the ancient, opposed to *les Ombriens*, the modern races, of Umbria.

[2] Dr. J. Barnard Davis (*Thesaurus*, xv.) says: 'Where the breadth is to the length in proportion of 0·80 or more to 1·00, the skull is placed in the brachycephalic category; where it is below that proportion, or less than 0·80 to 1·00, in the dolichocephalic.' I have retained the learned author's three terms—*cranium*, for the whole skull and face; *calvarium*, wanting the lower jaw; and *calvaria*, when only the vault of the skull, the cap or *calotte*, is in question; but I hesitate to adopt the letters, *e.g.* A (internal capacity), B (circumference), C (fronto-occipital arch), etc. etc.

(No. 5). The cranial capacity is measured as usual by sand, when the cranium permits; in other cases the Professor uses the rule of Broca and Beltrami: 'Multiply the three axial diameters of the ellipsoid, and divide by $\frac{19}{45}$.' The relations of pre-auricular to post-auricular are obtained in two ways: 1st, divide the horizontal circumference by the bi-auricular arch; 2nd, divide by the same arch the fronto-occipital curve, and measure the proportions in front and behind it; or, better still, the whole vertical circumference, dividing it by the chord which is the base of that arch—in other words, by the transversal bi-auricular diameter.

I. Professor Calori begins with the Umbrians, of whom he had collated 15 pure specimens in the Anthropological Museum from the Contado di Camerino, where the Etruscans are supposed not to have penetrated; and where the Romans did not rule till the decadence of Etruria: he compares them with a much larger number, the modern descendants of Umbria and the Marches, not including Ancona which is Greek. The proportions of the long are 8 to 7 short heads or 53 per cent.: this figure is notably different from the actual inhabitants, who show 29—30 : 100. He describes and figures five

skulls (Nos. 1–5, plates i.–iii.), one cranium and four *calvaria*, almost all deficient in some part.

(*a*) The old dolichocephalic Umbrian has a mean cephalic index of 75·07, which in the Roman becomes 77·70. The average cranial capacity is 1,375 cubic centimètre (=83·914 cubic inches), which attains 1,558 c.c. (=95·082 cubic inches) in the Roman, and 1,506 c.c. (=91·908 cubic inches) in the Kelt. The latter shows a marked difference from the former; he is not only more dolichocephalic, but also, like the Keltiberian, he is parieto-occipital, instead of being parieto-frontal. Amongst the 19 Umbrians the post-auricular form prevails over the pre-auricular, and the pre-auricular is more highly developed horizontally than vertically. (Nos. 1–2, Tables i.–ii.). The sutures are pervious: the *norma verticalis* is either oval or elliptic. The *norma lateralis* or profile (mean facial angle 79°) shows a straight and moderate forehead with the *tubera frontalia*[1] and the nasal sinus tolerably well marked; the arch is regular, the occiput prominent, and one (No. 3)

[1] In many West African skulls, especially at Dahome, I remarked the absence of the *tubera frontalia*, or rather their conversion into a *tuber frontale*, a central boss, whose sides sloped regularly away in all directions. This form is most common in women, and it gives the face a peculiarly *naïve* and childish expression, the reverse of intellectual.

has a large *fontanelle*; the zygomatic arches are of middling strength and curve, the anterior nasal spine is well developed, and there is a slight alveolar prognathism. The *norma facialis* (front view) shows a fine broad brow, a large *glabella*, quadrangular orbits, horizontal or oblique, and the general squareness of the old Italic skulls, especially inherited by that 'quid novum' the improved Roman. We see this in the statues of the Emperors, and we can hardly wonder at it when we remember the origin of the Luceres (Tusco-Umbri). The *norma basilaris* (or *occipitalis*) gives a well-developed occipital crest and semi-circular lines, whilst the foramen is central.

(*b*) The brachycephalic Umbrian skull (plate iii.) is described as 'esquisitamente bello': c. i. 81·79, thus not very short; average cran. cap. only 1,409 cub. cent. (=85·987 cubic inches); post-auricular equally developed horizontally and vertically, whilst the pre-auricular preponderates in the former direction—hence the brachycephalic is less pre-auricular than the dolichocephalic. The sutures are mostly open and the vertex is oval; the profile (facial angle 80°) is elegant, and in one most elegant; the forehead is straight, with strongly marked sinuses, and

is rather high than otherwise. The zygomata are moderate: orbits horizontal, squarer and somewhat smaller than in the dolichocephalic; nose not prominent, occipital tubercle hardly marked, and foramen posterior; there is a slight alveolar prognathism, with perpendicular teeth. Finally, the Professor notes the essential differences between the brachycephalic Umbrian and the Ligurian (plate viii.).

II. Of the Central Etruscan skulls (9), five are described and figured (Nos. 6–11, plates iv.–vii.). In these dolichocephalism is more common than amongst the Umbrians; Nicolucci gives 37 : 100; Zanetti 23 : 100; and Calori somewhat reduces the latter figure.

(*a*) Of the three dolichocephalic, the average c. i. is 75·63, which Nicolucci marks 76·08. It is thus a medium between the Umbrians (75·07), and the Romans (77·70). The cran. cap. is (mean) 1,375 c. c.; in three specimens (Nos. 6,7 and 8) it rises to 1,629 c. c. (=99·415 cubic inches), the Umbrian being 1,375 and the Roman 1,558; the maximum is large and almost equal to the Keltic. The post-auricular constantly prevails. Sutures all pervious and wanting Wormian bones. Vertex ovoid, and in one there is a slight *carena* bisecting the brow. The

profile has a facial angle averaging 75°·50. Forehead almost straight or slightly oblique, generally somewhat depressed and compressed; temples flat, and lower part of brow narrow; orbits now square, then circular, here horizontal, there oblique; face longer than in the Umbrians and notably broader in correspondence with the zygomata; nasal bones suggesting aquilinity, and chin various.

This type is pronounced to be different from all the Italic crania, Ligurians, Pelasgians, Oscans, Umbrians, and Romans. It cannot be compared with the old Egyptians (17 specimens), with the Helvetians, or with the modern Italian Jews (6 specimens). The latter are much more dolichocephalic; they are larger, and the face is long, whilst that of the Etruscan is broad. There are certain points of resemblance with the modern Sards (22 specimens), supposed to be Phœnicians, such as the proportions of the pre-auriculars to the post-auriculars, the cranial arch and the frontal height. This latter approaches the Egyptians and Phœnicians, but it is very different from the Jews. The Phœnician analogies, whom the Professor will call 'Hamitico-Semites,' are given with considerable detail (pp. 111–121). He cannot say that the dolichocephalic Etruscan is either a

Semite or a Phœnician, but the *nescio quid* of the expert suggests Egypto-Phœnician. In conversation, Prof. Calori also compared them with the Carthaginianised Sards, especially the modern skulls dating from the last three centuries.

(*b*) Of the brachycephalic Central Etruscan only two skulls are given (Nos. 10 and 11; plates vii., viii.). They appear larger than those of the ancient Umbrians and best agree with the old Ligurians—c.i. 80·67, and cran. cap. 1,479 c.c. (=90·026 c. inches); in the Umbrians 1,409, and in the Ligurians 1,461. The vertex is ovoid, but, like the dolichocephalics, it is anteriorly narrower than in the Ligurian. The profile (f. a. 75°·50) gives well-expressed circular lines of temple, deep fosses, and strong zygomatic arches with the zygomata turned outwards. The forehead is straight, rather low, broad above and narrow below, like ii. (*a*); it has a sign of the longitudinal *carena*, and the sinuses are better marked than the *tubera frontalia*; the orbits are small, horizontal, and deep, rather square than round. The peculiarity of one mandible (No. 11*, plate viii.) is the wearing down of the teeth, which has been noticed in several others: the corona is not shortened, as amongst the Guanches of Tenerife, by eating

parched grain; it is reduced to two large cutting cuspides, in saddleback form.[1]

III. The Certosa find, where, out of 365 funeralia, 250 affected inhumation, appears more important than it proved to be. The damp, the superincumbent weight of earth, and the long inhumation of 20 centuries had rendered all the Felsinean crania useless except 16 (a total of 40), and of this poor number only one was perfect. The Necropolis, however, served to establish the average stature of the race; the men measured 1·75 mètre (= 5 feet 8·90 inches) and the women 1·58 mètre (= 5 feet 2·20 inches). Certain analogies with the negro and the pre-historic man were shown by the latter; as the proportional length of the forearm to the whole arm, and the thigh to the leg, together with a higher degree of prognathism. The elliptical perforation of the supratrochlear fosses, which appeared to be congenital, and not the effect of *marasmus senilis*, also suggested Africa, whilst the acinaciform (*en lame de sabre*) tibiæ, laterally compressed and acute at the edges, are familiar in the pre-historic[2] skeletons of

[1] Dr. Paul Broca gives the indicial differences of the nine Etruscans Proper as—The maximum, 81·01 : 100; the minimum, 70·41; and a mean difference of 10·60.

[2] Dr. Paul Broca, reviewing Calori and Conestabile (*Ethnogénie*

the oldest types. Only two of the 250 showed the frontal sutures so common in the Umbrian and the Marzabotto skulls: in modern crania they average 7–10 per cent. Of the 16 a proportion of 45 : 100 were brachycephalic,—Nicolucci at Marzabotto proposes the figures 46·65 : 100.

(*a*) The eight dolichocephalic Felsineans (nos. 14–21, plates x.–xiv.) unite the characteristics of the Umbrians, Etruscans, and Romans. In the six males the c.i. averages 77·33, in the five females 77·28, giving an average for both sexes of 77·30½; thus they are less in length than the Umbrians and Etruscans, much less than the Kelts, and corresponding with the Romans (77·70). The average cran. cap. of both sexes is 1,344 c.c. (= 82·022 c.i.), of the men 1,560 (= 95·204 c.i.), a figure superior to the dolichocephalic Etruscans and Kelts, and equal to the Romans. The post-auricular predominates in 84 per cent. In two specimens the bones are so thick as to suggest hyperostosis. The ovoid skulls appear anteriorly narrow on account of the

Italienne: 'Les Ombres et les Etrusques,' pp. 289-297, Vol. III., *Revue d'Anthropologie*), separates Pre-historic (unknown) from Proto-historic (legendary) and from Historic (written): the latter in its positive form began with B.C. 500 in Greece, with B.C. 300 in Southern and Central Italy—famed for proto-history,—and with A.D. 300 in Northern Europe.

great posterior breadth, yet they are wider than the Umbrians, Etruscans, and Kelts, and correspond with the Romans; the bimastoid diameter gives greater breadth than the Umbrians, and excels the Etruscans and Romans. The profile (facial angle 76°·25) shows an arch more or less pronounced; some are flat,[1] and one has the *cacumen* rising to the phrenologist's region of firmness, often noticed in Piedmontese skulls. Forehead not high; occiput projecting, and tubercle well developed; *glabella* larger than in Etruscan; temporal fossæ rather deep, and zygomata turned out; auditory *meatus* central; orbits straight, round, or oval, and nose Etruscan. The teeth are fine, somewhat large, and all more or less worn. The occipital foramen is central or posterior. Thus the Felsinean dolichocephalics of the Certosa show a considerable Italic and Etruscan innervation.

(*b*) The six brachycephalic Felsineans (Nos. 22-28, plates xv.-xvii.) are mostly of fine proportions. The

[1] The traveller, however innocent of craniology, cannot fail to remark that races in the lower, if not the lowest, stages of society—for instance, the so-called Red Man of North America—have the upper part of the skull most level; it is also a marked feature in the pure negro of Central Intertropical Africa. The *cacumen* at the apex of the cranium is highly developed in the Bedawin, a race of no 'education' but of much culture.

average c.i. is 83·21 ; the mean cran. cap. 1,487 c.c. (=90·749 c.i.). The post-auricular prevails as 84·70 per cent., the occiput showing a pronounced tubercle. The ovoid is more or less short and broad, in one case almost an ellipsis. The forehead (fac. ang. 75°·50), straight or oblique, is moderately high; the *meatus auditorius* is central; the orbits are rather horizontal and circular ; the nose is gently curved, and the mandible is robust, with fine large and vertical teeth. The facial region is elongated. The occipital foramen is less central than in the dolichocephalics.

Thus the Felsineans are the least dolichocephalic of the three races, the c.i. averaging 79·35 ; the Umbrians 78·21, and the Etruscans 76·22 : whilst the maximum is 86·36, and the minimum is 75·00—an extreme difference of only 11·36. In cran. cap., 1,464 c.c. (89·345 c.i.) they stand between the Umbrians (1,386 c.c. =84·385 c.i.) and the Etruscans (1,481 c.c. =90·383 c.i.) Assuming 100 as the post-auricular unity in both directions, the relative pre-auricular proportions are expressed by the following numbers :—

	Horizontal.	
Felsinean Skulls.	Etruscan.	Umbrian.
90·68	95·17	90·71
	Vertical.	
84·89	89·26	85·18

Thus the post-auricular, which invariably preponderates, is less in the Etruscans, whilst the Felsineans and Umbrians, although the circumference differs in both, show nearly equal proportions. The Felsineans, compared with a hundred modern Bolognese skulls, are in some points remarkably similar; the difference of the cran. cap. (Fel. 1,464, and Bol. 1,475) is only 11 cub. cent. The Bolognese is shorter and broader, his post-auricular being 264, to 262 millimètres (10·3937 to 10·3149 inches) of pre-auricular, figures which in the Felsineans are 279 and 253 (=10·9842 to 9·9606). The general conclusions which Prof. Calori draws from his minute craniological observations, of which this is the merest sketch, are the following :—

1. The old necropolis 'alla Certosa' is that of the 'Lucumonian City,' Etruscan Felsina. It probably continued to be the Felsineo-Etruscan cemetery after the Boian invasion, and, as the uncial *as* seems to prove, it served till the end of the sixth century of Rome. There is no proof of any Boian element having entered it.

2. Felsina was first an Umbrian and afterwards an Etruscan city; its population was composed of Umbrians, or rather Italic peoples, of Etruscans, and of other races in minor proportions.

3. The Italic tree, of whom the Umbrians were an important off-shoot, is a branch of the Italo-Grecian stem—in one word, Aryan.

4. On the other hand, we cannot with equal certainty define, either by history, by monumental remains, or by anthropological science, the origin of the Etruscans, or determine whether they were Aryans or Semites, or a mixture of both, or Aryans and 'Hamites' or 'Hamitico-Semites.' Fourteen centuries before our era we find them, leagued with the Lycians and other Mediterraneans, battling with the Pharaoh on the left bank of the Nile; and we see them in remote ages the most civilised and powerful of the Etruscan peoples. Beyond that, our view is limited by the glooms of the past.

5. The Umbrian and Etruscan skulls show an intermediate or transitional rather than a pure dolichocephalism, and the long is more common than the short head; whilst brachycephalism is more frequent amongst the Umbrians than amongst the Etruscans.

6. In the Umbrian and the Etruscan dolichocephalic skulls the latter are distinguished by a superior cranial capacity, by a somewhat longer form, by less disproportion between the pre-auricular

and the post-auricular halves, by increased length of face, by more frequent prognathism, and, finally, by greater disproportion between the transverse diameter of the lower frontal and the inter-zygomatic lines—peculiarities which make the true Etruscan skull a well-marked type.

7. In the Umbrian and Etruscan brachycephalic skulls there are also distinctions: the former especially cannot be confounded with the Ligurian; they appear to belong to another root (*stirpe*); perhaps to the Illyrian, the Albanese, or the Epirotico-Pelasgian.

8. In the Certosa skulls we also find more frequent brachycephalism, nearly in the same ratio observed amongst the Umbrians, and an intermediate dolichocephalism neither decidedly Umbrian nor decidedly Etruscan, but, as in the case of mixed races generally, sharing the peculiarities of both peoples.

9. The brachycephalic Felsineans may have been mixed with the Ligurians, but the proportions in that case were small; the greater number points, like the Umbrians, to another root, or, perhaps, to several different roots.

10. We have no data to determine whether the

Boians, Lingonians, and Keltic Gauls were dolichocephalic or brachycephalic; and, supposing that they modified the Felsineans, we can hardly conjecture what that modification may have been.

11. Finally, the modern Bolognese skulls are more frequently brachycephalic, and show a much greater pre-auricular development than the old Felsineans.

SECTION V.

THE ETRUSCAN LANGUAGE.

PROFESSOR CALORI showed scant sympathy with the Turanian or Mongolian theory, which has been patronised by Pruner Bey and G. Lagneau, and which was not wholly rejected by the learned Nicolucci. In England the Altaic, or—as the author calls it, Ugric—tribe of Turanian has lately been advocated in England, on linguistic and mythological grounds, by one of those marvellous popular-scientific books, like 'The One Primæval Language,' and 'India in Greece,' by which the abuse of 'private judgment,' and, perhaps, a 'compound ignorance' of the subject, periodically causes the reading world of Europe to laugh, and the British Orientalist to blush.

'Etruscan Researches,' by the Rev. Isaac Taylor (London, Macmillan & Co., 1874), sets out with a thoroughly erroneous and obsolete assertion which succeeds in vitiating almost every research.

We are told at the first opportunity (p. 2) that 'the ultimate and surest test of race is language.' As the multitude of general readers still allows itself to be misled upon this point, whose proper determination is essential to all correct anthropology, I will consider it in a few words.

Long ago my friend Prof. Carl Vogt asserted and proved that 'un peuple peut toujours avoir adopté une langue qui n'était pas la sienne.' We have familiar instances of the Longobardi in Italy, the Franks in France, and the Visigoths in Spain, changing their own tongues for various forms of neo-Latin. The Aryan-speaking Baloch merge their rugged variant of Persian into the Arabic of Maskat, and into the African Kisawahíli or *lingua-franca* of Zanzibar. Well worth repeating are the words of Prince Louis Lucien Bonaparte ('Anthrop. Inst.' Feb. 9, 1875): 'It is a bold theory to advance that language is a test of race, and a no less bold opinion that language should be rejected as an evidence in the question.' Finally (p. 356), we have the obsolete 'Grimm's Law' about the 'drei Kennzeichen der Urverwandtschaft;' the three signs of primordial affinity of languages, being the numerals, the personal pronouns, and certain forms

of the substantive verb. The importance of numerals is especially laid down (p. 158), when all know that they are exceedingly liable to phonetic decay, especially those most used; for instance, *eka* (Sanskrit), εἷς, *unus*, and *jedian* (Slovene). Mr. Robert Ellis has fallen into the same trap when advocating primæval unity.

Bearing in mind Prince Bonaparte's sensible limitation we proceed to the process by which the Etruscan Researcher, who speaks (p. 182) of 'the discovery of Sanskrit,' has invented for the Etruscans a dialect of his own. Before him others have adopted the facile plan of compulsing a host of dictionaries, vocabularies, and strings of words, Hebrew, Chaldaic, Arabic, and Syriac, Himyaritic, Ethiopic, and Coptic, and of compelling one of them to afford the explanation required. This is a process which, by-the-by, I am sorry, in the interests of 'glottology,' to see spreading: without exact historic knowledge and extensive linguistic practice it can only do harm. Similarly our author, by turning over the eleven volumes of 'Nordische Reisen,' etc., and Alexander Castrén (*Finn, Myth*, etc.), and by borrowing from the dialects of some 48 detached Turanian tribes, ranging between the

Ainos and the Magyars, the Finns and the Seljuks (Osmanlis), has created a conglomerate never yet spoken, nor ever possible to be spoken, by mortal man. He rarely attempts an explanation of the phonetic laws which govern his cognate languages; he relies, not upon grammar and formative system, but on detached words; and he treats the digraphic and other inscriptions, not as a decipherer or an archæologist, but as a 'comparative philologist.' And—will it be believed? —this pseudo-speech is made, with dogmatic self-confidence, to explain the origin of, not only Lycians, Carians and Phyrygians, Cilicians and Pisidians, Ligures and Leleges, but of the debated Euskaric and even the ancient Egyptian (Coptic, p. 39), whilst in p. 68 we are told that Egypt is a Semitic region; and, finally, the mysterious Albanian is simply the vulgar Finnic —'Tosk' being converted, not honestly, into 'Toscans' (p. 20).

Another unsupported and erroneous assertion is, that mythology, like language, is an 'absolutely conclusive test of (racial) affinity' (p. 85). It often represents certain phases of social development through which all civilised peoples have passed,

and the same basis of religion—which we may, in the absence of a better word, call Fetishism—has served for the Aryan and the Semite as well as for the Turanian.

The worship of the dead is held by some reviewers to be the strongest argument of Turanian affinities. They will find it throughout half-civilized Africa, Dahome, for instance. The 'Ugric practice of sorcery' (p. 14) is simply universal; every reader of Blackland travels is familiar with that stage of society; and 'magic' need not be derived from 'Magi' (p. 79) when we have the Persian equivalent 'mugh' (مغ) a *magus*. Animism is represented to be the peculiar creed of the Turanians (p. 35), when it is the dawn of faith, the belief in things unseen; therefore it was universal, and it lingers in the most advanced creeds—for instance, in Christianity, to whose spirit the material ghost is opposed. We have (p. 84) the vague assertion that "Semitic races tend to a theocracy, while the tendency of the Aryans is to a democratic government:" this view is formed by reading only Jewish, Greek, and Roman history; but the Bedawin, the type of the so-called Semitic race, have never shown a symptom of theocracy, and, indeed, may be said to be of no

religion at all. 'The Turanian tombs are family-tombs' (p. 36); but what are the so-called 'Tombs of the Kings' and 'of the Prophets' near Jerusalem? What are those of Dahome, Ashanti, and Benin?—perhaps these also are Turanian! Of the contradiction about the temple and the tomb (pp. 41 and 49) I have already spoken. Even Stonehenge (p. 43) is a primæval sepulchre of the Turanian type, when Mr. James Fergusson has proved it to be comparatively modern. I presume that Pococke's 'two black demons' who 'dwell in the sepulchre with the (Moslem) dead' (p. 117, from Dennis i., 310) are our old friends the Angels Munkir and Nakir, known to Lord Byron; they simply visit the corpse for the purpose of questioning it. And most people know that the Arab Jinn was a human shape made of fire, not 'an unsubstantial body of the nature of smoke' (p. 127).

The geographer and anthropologist stand aghast before the seven 'Ethnographic Notes' which contain such assertions as these. 'This is an absolute note: No Aryan or Semitic people is found separated by any great interval from other nations of a kindred race' (p. 69). Some have traced the Aryan tongue to South America, and what are the

Gipsies scattered about the Old and New Worlds? Are the Jews Semites or Turanians? And the Arab, who, in pre-historic times, spread north-east to Samarkand, south-east to Malabar, south-west to Zanzibar and Kafirland, and west to Morocco and to Spain? Is this 'an unbroken continuous block without detached outliers'? How can it be said that the 'conquests of the Goths, Vandals, and other Teutonic (add, Scandinavian), and Slavonic (Slav)[1] races' were the 'conquests of armies rather than the migrations of nations' (p. 81)? It sounds passing strange to an Englishman in Istria, surrounded by vestiges of Kelts and Romans, and preserved by a Scythian population. We read, again, (*ibid.*) the 'Turks have developed a remarkable genius for the government and organisation of subject races,' when the experience of the Eastern man is embodied in the proverb that where the Osmanli plants his foot the grass will not grow. Nor did the Turks 'instinctively take to the sea' (*ibid.*); they engaged Greek, Dalmatian, and other Aryans to man their ships. How are the Nairs of the Malabar coast 'hill-tribes' (p. 57)? are they confounded with the Todas of the Nilgiri? We

[1] I am sorry to see Mr. Freeman using the debased form 'Slave.'

are told (p. 66) that 'geographically, ancient Etruria is modern Tuscany,' without the qualification that there were two other sets of 'duodecim populi'—one to the south, the other to the north-east,[1] so as to embrace nearly the whole peninsula; and in 1874 the author had apparently no knowledge of the immense finds which since 1856 have enriched Bologna. Converging door-jambs (p. 353) are, doubtless, Egyptian and Etruscan, but also they belong to all primitive architecture, the object being simply to facilitate the construction of the lintel; we find them in Palmyra, and we find them in the far West of America. I read (p. 66) that ceramic art is the one permanent legacy which the Etruscans have bequeathed to the world, when all their highest works were either imitations of the Greeks or were imported from Greece; nor have we a word about the merchant-prince Demaratus of Corinth, who is said to have brought the alphabet to Etruria (Tacit. 'Ann.' xi. 14, and others) with the *fictores* Eucheir and Eugrammos (titles, not names). The 'passion for vivid and harmonious

[1] Dr. Paul Broca (*loc. cit.*) remarks that Etruria 'Media' is a purely geographical term, which, anthropologically speaking, should be 'Antiqua,' opposed to 'Nova' (Circumpadana), and to 'Novissima' or 'Opicia': the latter is disconnected by Latium, which was never occupied by the Etruscans.

colour' is not only Turanian (p. 65); even we English have received it in Fair Isle from Spain, which received it from Morocco. 'Tracing descent by the mother's side' (p. 14) is common to an immense number of barbarous races; the Congoese Africans, for instance, can hardly be Turanian, and even the old Icelanders, who have nothing in common with the 'Skrælingjar,' under certain circumstances took the surer matronymic.[1] Exogamy, again (p. 58), belongs to a certain stage of society where all the members of the tribe are held to be of one blood, and where marriage would be within the prohibited degree. We find it amongst the East African Somal, who will be Turanians only when the Copts are.

It would be fastidious work again to slay the slain after the critique upon the vocabulary of 'Etruscan Researches,' printed in the 'Athenæum' of March 28th, 1874, by Mr. Wm. Wright. But

[1] The case stands thus: The Lycians (Herod. i., 173) always traced their descent, unlike the Greeks and Romans, through the maternal line, and this has been verified by Fellows (*Lycia*, 276). The Etruscans (Dennis, i., 133) 'being less purely Oriental, made use of both methods.' But this careful author is hardly justified in deriving the custom from the East: it would arise naturally from the high position of women in a people of diviners, augurs, and, perhaps, of mesmerists; but we cannot say that such dignity is an Asiatic custom.

the absolute ignorance of all Eastern languages, and the unscrupulous ingenuity with which names of persons and places are distorted, require some notice. The authority of MM. Lenormant, Sayce, Edkins, and Sir Henry Rawlinson is invoked ('Athenæum,' May 2nd, 1874) to defend as Turanian or 'Turkish' such familiar Arabic words as Nasl, Jinn, and Ghoul; but what of 'li-umm' (*Lemures*!) meaning simply in Arabic 'to the mother'? The learned interpreter of Cuneiform must be charmed with the *rôle* here assigned to him. The name of Attila, we are told, is 'of an Etruscan type, and can be explained from Etruscan sources' (p. 75), when we find it even in the Scandinavo-Aryan *Atli*. 'The name of the Budii, a Median tribe,' is 'seen in the town-name of Buda in Hungary' (p. 78); the latter (*buta*), signifying literally a 'boy,' was the proper name of Atil or Attila's brother, put to death by him. The disputed word 'Ogre' is derived 'from the Tartar word *ugry*, a thief' (p. 376), which also named the 'Ugrian,' I should rather find its equivalent in the Hindú *aghor*, as *aghorpanthi*, the religious mendicant, part of whose Dharma (duty) was cannibalism. 'The very name of DARIUS, the Mede, can be

explained from Finnic sources,' which seem able, like a certain statesman, to explain away everything (p. 79); but we trace its cognate in the modern Persian Dárá. 'Tarquin' (Tarχi) is Tark-Khan, the prudent prince (*ibid.*); 'Lucumo' (p. 322) means 'great Khan, from *lu* and *kan* (for 'khan'); and here we may note that the 'great Cham of Tartary,' which the unlettered Englishman is tempted to pronounce as in '*cham*'-ber, came to us through the Italians. Perfunctory enough are the connection (pp. 266–8) of the prænomen Vele (an axe-handle, or *ful* in Yeniseian) with Caius (a cudgel, Latin, *caja*), which was Gaius; and such resemblances as Soracte with Ser-ak-Tagh, snow-white mountain (p. 346)—worse than Nibly's Pelasgic Σωρὸς-Ἀκτή—as Ascanius with Szön Khan, and as Iulus with Eszen Ili (p. 374), ancestors of the Turkomans. Father Tiber (p. 330) hails from 'Teppeh-ur' (peh Teppeh, hill, Persian *ur*, water, Turanian ?); but what of Varro's Thebris or Dehebris, and of Thepri, Thephri, the forms given by Dennis (ii. 481)? Who has attributed the invention of dice to the *Etruscans* (p. 332)? The derivation of Kiemzathrm (p. 188), explained, as 2 + 1 + 4 + 10 + 1, to mean twice forty or eighty, from the Yeniseio-Ariner 'kina-man-tschau-thjung,'

is a masterly waste of time to the reader as well as to the writer. If Juno (p. 133) come from Jomu, God, we will take the liberty of associating with her our old friend 'Mumbo Jumbo,' *not* worshipped in the Mountains of the Moon.

In p. 315 the Etruscan 'Antai,' *the winds*, are identified with *ventus*, ἄνεμος, and the Teuton *wind*, when the Sanskrit *váta* shows the nasal not to be radical. Why go to the Ugric *ker*, or *akcr* in Lapp, for *ager*, when even in Scandinavian we have *Akkr* (p. 333). As Dr. Birch remarks ('Athenæum,' June 20, 1874), Mr. Taylor has made a '*petitio principii* in assuming that *thapirnal* = *niger*; *kahatial* = *violens*, *kiarthalisa* = *fuscus*, and *vanial* = *scæ calis*, whatever that may mean.' It by no means appears that the Roman words in the bilingual epitaphs were translations of the Etruscan; they might have been aliases. 'In fact, *kahatial* is translated in the bilingual inscriptions *cafatiâ natus* and *varnalisa* by *variâ natus*, not *Rufus*, which, added afterwards, was something besides which he was called, as an agnomen in Latin, but not Etruscan. In p. 319 we are informed that there is no tenable Aryan etymology for *pōpu'lus*, the poplar-tree, whence Pōpulonia. Colonel Yule

('Some Unscientific Notes on the History of Plants,' p. 49, 'Geog. Mag.,' Feb. 1875) has shown the contrary to be the case; like *bhurja*, the birch, the word accompanied the earliest emigration from the East. *Populus*, *pioppo* (*fioppa*, in Bolognese), *peuplier*, and poplar are the Sanskrit *pippala*, the modern Hindú *pipal* (*Ficus religiosa*), whose superficial likeness causes the French to name the Indian fig 'peuplier d'Inde' and the Palermo gardener to baptise it 'pioppo delle Indie.' Major Madden also found the *populus ciliata* of Kumaon called by the people 'Gar-pípal.' Lord Crawford explains the Etruscan Bacchus by this process 'Pampin= ϝαμπελ = Phuphl + ans, uns or ana = Phuphluns, Pupliana, *i.e.*, "God of the Vine."' The existence of the Huns in Etruscan days is proved (pp. 76 and 367) by the word HVINS (mirror engraved by Gerhard. Taf. ccxxxv.), the terminal sibilant being 'probably the Etruscan definite article.' I suggested ('Athenæum,' March 28, 1874) that the word might also be read HLINS, (Hellenes?) part of an inscription over what has generally been supposed to be the Trojan Horse. Dr. Birch, however, says ('Athenæum,' June 20, 1874) that it 'may, with equal, if not greater, proba-

bility, be referred to the capture of Pegasus (Pecse) by Vulcan (Sethlans), and to the Fountain Hippokrene, or *Fons Caballinus*, in Etruscan *huins*, analogous to the Latin *fons*. He suggests 'Etule Pecse Sethlans,' as equivalent to the Greek 'Edoulene Pegason Hephaistos;' but 'under any circumstances the Huns take to flight.' Again, it is evident that the inscription 'Nusthieei' or 'Nusthieh' (pp. 112–113) should be read the other way, Heithzun, or, probably, Heiasun—Iason or Jason, according to Dr. Birch. The difficulty is that the E faces from left to right and the S from right to left.

'The French Maréchal,' a groom or farrier (p. 267), is not fairly explained. Our popular derivation is from the Scandinavian *mara*, a mare—hence *nott-mara*, a night-mare—and *skjald*, a servant. The latter has passed through sundry vicissitudes before he became a mar-*shal*. I would, however, observe that the Illyrian and other Slavs have *mara* or *marra*, meaning a witch. It is unpardonable to make (p. 113) historic 'ezhdiha' Turkish; everyone knows the origin of this Persian word, the old Bactrian and intensely Aryan *az-i-dahâka*, the biting snake; the *ahi*, the *midgardsorm*, the *zohak* of Firdausi—slain, according to Zendavestan

tradition, by Thraetavna (Indra). Curiously enough, the Illyrian Slavs still retain *ažđaja* (pron. 'azhdaya') for a 'dragon.' The CAMEL,[1] with capitals (p. 151), as if alluding to Henri Heine's 'Great Camel Question,' is, we are assured, 'Turanian;' when the Semitic *jamal*—pronounced, probably, by the Jews and Phœnicians, and certainly by the modern Bedawin, 'gamal'—became the *kamel-os* of the Greeks. It may explain *Camillus*, but if so, the word is, like *Cadmus*, Semitic. Of the four test-words, 'on which the whole case as to the Ugric affinities of Etruscan might safely be rested' (pp. 93–113)—*kulmu* (which Corssen reads *culsu*, p. 380), *vanth*, *hinthial*, and *nahum*—the second and third are interpreted by the wildest processes. *Vanth* (*thanatos?*) relies solely upon the 'Turkish' *fáni* (p. 102) and '*vani*,' ready to perish' (p. 103); the former being pure Arabic, and the latter a corruption of the active form *fáni*. *Hinthial* loses half its superficial resemblance to the Finnic *haltin* (or *haldia*, p. 107), 'which is, letter for letter, the same

[1] I regret that no one has answered my questions in the *Athenæum* (March, 1874) concerning the Etruscan camel, whether it be the Northern (two-humped) or the Southern. And it is even more to be regretted that in the *Lost Tombs of Tarquinii* (Dennis, i., 348) no notice was taken of the elephant being African or Asiatic.

as the Etruscan word,' when we compare its other form 'phinthial'; nor can we 'identify' it (p. 109), with 'the Turkish *ghyulghe* (*gyulgeh*), a shadow,' or break it into hin-thi-al, 'the image of the child of the Grave' (p. 111). *Manitou* (p. 136) is certainly *not* 'the North American heaven god: it is simply the *haltia* of the Finns; the phantasm which resides in every material object. To such information (p. 102), as 'the suffix d *or* t (!) in Turkish commonly denotes abstract nouns' we can only reply 'Pro-di-gious!' The four Arabic words *melekyut* (*malakiyyat*, from *malik*), *munidat* (corrupted), *nejdet*, and *nedámet*, quoted in support of this doctrine, end with what grammarians call the Há el-masdar (*h* of abstraction). A man must be Turan-smitten, must have caught a Tartar, to find (p. 124) that 'the title of the Russian Emperor, the *Tzar*, is doubtless of Tartaric origin;' and perhaps he would say the same of Cæsar and Kaiser. But, seriously, is all history thus to be thrown overboard? And why, in the name of common sense, should we compare the 'Indian *Menu*' with *Mantus*, *Minos*, and *Manes*? (p. 122). Why, again, should not Kharun be Charon, instead of Kara (black), and '*un*, an abraded form of *aina*, a "spirit, or of *jum*, god"'?

(p. 118). The derivation (p. 160) of the Etruscan *mach* (one),[1] though 'safe ground to tread on' (p. 174), is another marvel. It proceeds from the Turkic *bar-mach*, a finger (read *parmak* or *pármak*), and the 'Turkish' (!) *mikh lab*, 'the clawed foot of a bird or animal,' *i.e.*, the noun of instrument in Arabic from the triliteral root *khalaba*, 'he rent.' So in our vernacular the fish-*fin* perhaps comes from *fin*-ger. And yet this conglomerate of errors is made to take a crucial part in the Turanian scheme; it is the basis of interpreting the 'invaluable' (Campanari) dice of Toscanella, now in the Cabinet des Médailles, Paris, where words, taking the place of pips, form, according to some scholars, an adjuration or prayer, to others a name and a gift. Lord Crawford explains this (bogus) 'Rosetta Stone' of Mr. Taylor by an adjuration which also contains an echo of the current names of numerals in Japhetan, if not Teutonic, speech.

[1] Curious to say the only dialect in which *Mach* means one, is the 'Sim' of the Gipsies (see 'Anthropologia,' p. 498, vol. 1), probably derived from the Greek *μία*, whilst 'Machun' is two. Judged by its numerals, and by Prof. von W. Corssen's undoubted failure, Etruscan has no affinity with any known tongue, and though Mr. Ellis suspected a double system, this has not yet been proved.

	Mach (1)	Thu (2)	Zal (3)
(May the)	Dice or ace	of Zeus (two)	(in) number (three)
	Hut (4)	Ki (twice) Sa (6)	
	fall	twice sixes.	

And the *sprachforscher*, Prof. Corssen proposes (pp. 28, 806) :—

Mach	Thu-zal	Huth	Ci-Sa
Magus	Donarium	Hoc	Cisorio fecit.

Mr. Ellis (*Numerals as Signs of Primæval Unity*, and *Peruvia Scythica*, p. 158) makes *Makh* (1), *Thu* (2, duo ?), *Zal* (3), *Huth* (4), *Ki* (5), and *Sa* (6); Mr. Taylor, inverting the sequence, *Mach* (1), *Ki* (2), *Zal* (3), *Sa* (4), *Thu* (5), and *Huth* (6). The relics were found in 1848, and probably Mr. Taylor is not answerable for the 'dodge' which, in announcing his book, omitted the date and left the public to believe that, when the find was described in 1848 by Dr. Emilio Braun (p. 60, *Bull. Archæol. Inst. of Rome*), and afterwards of Orioli, Steub, Lorenz, Morenz, Bunsen, Pott, and others, a new 'key to Etruscan' had lately been discovered. But he is answerable for the tone of his reply ('Athenæum,' May 2, 1874) to the 'Gentle Lindsay' ('Athenæum,' April 11, 1874)—a painful contrast with the courtesy of the 'earl's blood.'

Such are the process of 'exhaustion' or 'elimination;' the far-fetched 'affinities;' the broadest conclusions on the narrowest of bases; the 'curious,' or rather supposed, 'coincidences,' the guess-work of an unwary philologer; the plausible agnation; the perverted ingenuity—such as holding ancient numerals to be fragments of ancient words denoting members of the body—and explaining the stone circles round tumuli as the survivals of tent-weights, which affiliate Etruscan with Altaic. These 'picklocks or skeleton keys' do not open the lock of the dark chamber, and the 'secret is locked with more than adamantine power.' The whole volume is a simple confusion of all scientific etymology, and its 'abrasion-doctrine' might be applied as profitably to deriving roast beef from plum-pudding. The 'cumulative arguments' which make the Rasenna Ugrians are mere sorites of errors called analogies, and exactly the same defects have been noted in the author's 'Words and Places.' Prof. Corssen, perhaps the profoundest Etruscologue of his age, even asserted that of twenty-two numerals which Mr. Taylor has claimed as proofs of the connexion between Etruscan and the Altaic branch of the Turanian family of tongues, as many as eighteen are not

even Etruscan, and, of the four remaining, three are pronouns, and one is a proper name.[1]

Finally, in his preface (p. vii.), the 'Livingstone of linguists,' as a certain reviewer entitles him, was 'conscious of the shortcomings' of his book; in the Reviews he fought his 'free fight' more obstinately for its errors, its hallucinations, and its ignorance than most men have fought for their truths. I was not a little amused after noticing his contradictions about the existence of Etruscan temples to read the diatribe ('Athenæum,' June 6, 1874) about my 'utter recklessness in making groundless accusations.' Let me ask, with the distinguished Arabist Prof. Wright, *quid plura?*

The Family Pen has never been employed worse than in writing 'Etruscan Researches.' Yet by substituting a scatter of colonists from Asia Minor, either Lydian or Lydo-Phœnician, for the pure Turanian, we may find in Mr. Taylor a useful picture of Etruscan life.

The conclusions which we draw from our actual

[1] Prof. Corssen's numerals are Italian :—Uni (1), Teis (2), Trinache (3), Chvarthu (4), Cuinte (5), Sesths (6), Setume (7), Untave (8), Nunas (9), Tesne (10), Tesne eka (11), and Tisnteis (20). Perhaps these may be the Italiot, used synchronously with the Lydo-Etruscan numbers.

state of knowledge concerning the Etruscan tongue are—1. That it may possibly be proved 'Italiot'; 2. That its origin and its affiliation are at present mysterious as the Basque; 3. That, whereas almost all previous authorities had advocated some form of the great Indo-European speech, Mr. Taylor has made himself a remarkable 'Turanian' exception; and 4. That certain Finnish 'affinities' deserve scientific investigation.

SECTION VI.

INSCRIPTIONS.

THE three great finds, Villanova, the Certosa, and Marzabotto, have made but one real addition to the inscriptive literature of the Etruscans. Whilst the Central and the Campanian Federations proved rich, the Circumpadan has shown itself exceptionally poor in this point, much resembling the Phœnicians, whom Prof. Calori assigns to the Etruscans as ancestry. The citizens of Sidon and Tyre were probably great writers of ledgers, invoices, and such matters, but how few are the important epigraphs which they have left us! In this point they offer a curious contrast with their immediate neighbours, the Egyptians and the Assyrians.

At Villanova no engraved record was found beyond the broad arrow, the *phœon* of heraldry, possibly representing the letter χ in two shapes—$\tilde{\Psi}$ ('La Necropoli di Vill.,' p. 52), V (*ibid.* p. 56). As a maker's mark (?) it has been detected, not

only in the other two diggings, but also at Adria, Mantua, Modena, and Reggio.

It is otherwise at the Certosa, and happily so, as the single important inscription (see p. 240) is able to remove all doubts about the Etruscanicity of the noble discoveries. The accompanying illustration is borrowed from a facsimile in lithograph (plate ix.) by Prof. Calori, who, after Fabretti, translates it (p. 4):—'I am the sepulchre of Tanaquil (Tankhe) wife of Titullius.' This feminine name began to appear at Chiusi, and it tho-

roughly establishes the Etruscan character of Old Felsina.

Cav. Zannoni ('Sugli Scavi della Certosa,' pp. 27, 54) tells us that a rough *stela* showed the letters **IAN**, perhaps to be read, as at Monte Alcino, from right to left, **NAI**; a similar cippus bore the letters **ITV** and **NIM**, the latter in red paint, whilst the largest and most perfect specimen of these noble headstones had **IAϗAN** inscribed under the horses' hoofs. The *sigli* or marks upon pottery found at the Certosa are about fifty, and they have been sent for publication to the celebrated Professor Ariodante Fabretti, who proposes to publish them in the 'Aggiunta,' or sequel to his 'Corpus Inscript. Ital. Antiq. Ævi.' Many fictiles are also inscribed. The familiar **ΚΑΛΕ** and (**ΗΟ ΠΑΙΣ** ?) **ΚΑΛΟS** often occurs; it is repeated six times upon the largest tazza, suggesting nuptial gifts to women, or presents to the 'beautiful boy.'

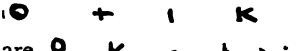
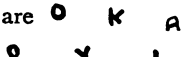
Cav. Zanetti (*ibid.* p. 39) offers the following scatter of *sigli* (marks) and *graffiti*:—

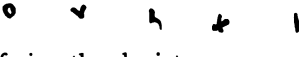
then

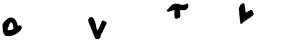
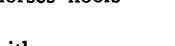
At the base of the vases

finally . Upon a tazza

were ΠΡΟΣΑΛΟ and PEVO : and upon the *kelebe* of the two *quadrigæ*, one face shows before the charioteer

 ; between the horses' hoofs are  ; and fronting the same appear

 . The other side offers also facing the charioteer

 ; and between the horses' hoofs  ,

with in front of them. The circle, it will be remarked, concludes every line. The following two words are of pure Etruscan type. appears

upon a pot-cover of brown clay, and

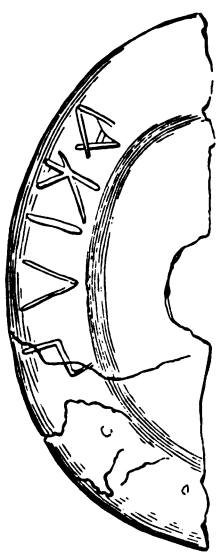
upon a red fragment,

The Etruscan alphabet is still a debated subject, especially in the matter of the two sibilants. Mr. Murray believes that the fact of their being double (M and Σ) points to an age when the Greeks had not abandoned the Samech (ס) as well as the Shin (ש = س or ش). The Etruscan alphabet of Bomarzo (Dennis, i. 225; compare with the Pelasgic or archaic Greek *graffiti;* and with the primers ii. 54, and ii. 138) begins, like all the Semitics, with Alif (Alpha). The next three do not follow the Hebrew form retained by the Arabs in their chronological *Abjad* (A, B, J, D), and by the Greeks with certain modifications. The three following are regular, *Hutti* (H, Th, the Etruscan and archaic Greek ⊙, the Arabic ط, and I or Y), and the L, M, N, are the Arabic *Kalaman*, omitting only, while the old Greek and the Lycian (Fellows) retain, the first. Then *Sa'afas* (S, Oin or Ayn, P or F, and S= ص, in Hebrew Tzaddi צ) is preserved only in two Etruscan letters P and S (M), and the eighth word *Karashat* (K, R, SH, and T) is likewise reduced to R, S (Sh ? Σ) and T. This certainly

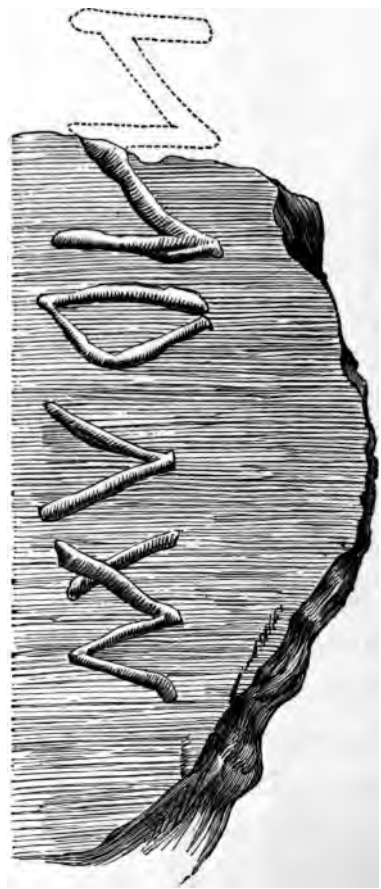
suggests that the second sibilant was aspirated (= Sh), while the absence of O is distinctly Arabic.

At Marzabotto, besides the pottery marks, we have the following three specimens :—

1.



2.



3.

Aurssa (pr oper name) on a *fibula*.

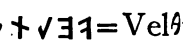
1. Archaic Etruscan inscriptions ('Akius') on the bottom of a clay pot found at Marzabotto.

2. Fragment of a clay tablet found in a 'funereal well' at Marzabotto.

The other four Bologna inscriptions, given in the 'Secondo supplemento alla raccolta delle antichissime iscrizioni italiche' (per cura di Ariodante Fabretti, Roma—Torino—Firenze presso i Fratelli Bocca, Librai di S. M. 1847) are the following :—

(No. 1 Plate.)

1.

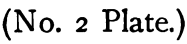


=Velθur ;

circularly inscribed upon the bottom of a red-clay pot found at the Certosa. Velthur is an Etruscan prænomen in the inscriptions of Tarquinii ; and, as the letters are evidently traced with the tool before the vase was burnt, it would appear to be the name of the maker.

2.

(No. 2 Plate.)



=Nru,

was forwarded, like the rest, by Cav. Zannoni to Prof. Fabretti in Dec. 1872. It is inscribed upon a fragment of a great *dolium*, found on the Arnoaldi property, near the Certosa; the letters are eight centimètres long, and are held to be part of the

name of the Bolognese artificer at Marzabotto, which Fabretti ('Corp. Inscr. Ital.' No. 46) reads *Nrús*, and not *Umrus*, *e.g.*

MVDИ.

3.

MVVAIHIH: MVIIIVИAΘ IH[VƧ]IM

Mi (*su*) *ti θanχvilús titlalus*, appeared copied from a clay model in 'Primo suppl.' to the 'Corpo delle antichissime iscrizioni italiche,' p. 2, note i.; then reduced to one-third natural size in the 'Atti della R. Accademia delle Scienze,' vii. 894, and lastly lithographed in the second supplement (plate No. 3). It is remarkable for the squared form of the A.[1]

4.

MIИVMDAKIIIE = *Veipi Karmunis*,
J

is inscribed above the two human figures, feminine on the right and masculine to the left, upon a great sepulchral *stela* from the Scavi Arnoaldi. Evidently the sculptor had no space for the letter J (V), as if he had begun from left to right, whereas the reading is the reverse. Here we may understand *Vibia, Carmonii uxor.*

[1] The facsimile is given in page 228.

5.

MISIO=*θiθis.*

VVAMVVI=*v. luχμa lu,*

is inscribed on a figured *stela* at the Certosa cemetery. The upper line, which contained some twenty letters cut into a band, is much injured; the lower, which separates the two human figures, is read easily enough. 'Luchma,' probably an archaic form, like Luchumes and Lucumu, is not without interest to those who study the relations between Upper and Central Etruria, which are daily developing themselves. The final syllable VV (*lu*) recalls to mind the prænomen VVVV (*Luchu*) read upon a fictile urn at Chiusi ('Corp. Inscr. Ital.,' No. 597 *bis* r).

SECTION VII.

MODERN BOLOGNESE TONGUE.

THE *contadinesca favella Bolognese* is little known in England, where Goldoni has made the witty Venetian dialect tolerably familiar. Mr. Greville ('Memoirs,' i. 404) simply remarks that 'the dialect is unintelligible,' whilst Mezzofanti assured him that it is 'forcible and expressive.' These local families, which are numerous throughout the peninsula, may hardly be compared with those of our counties, even with the difference of cultivation; they are rather what the speech of Holland is to that of Germany. Whilst we have, or rather had till late years, little, if any, written monuments, the Italian variants are rich in local literature. For example, the only book familiar to our forefathers of what the Gipsies now call the *Peero-dillin-tem*, foot-giving, that is, 'purring' or kicking county, and known to the great conversational linguist of Bologna was 'Thomas and Mary.' This generation has done much in cul-

tivating the rustic muse; yet the detached private publications, as opposed to those printed by the English Dialect Society and other learned bodies, are generally confined to their own parts, or, at most, to the curious in philology.

The fact of the Italian *favelle* being literary and not analphabetic, containing dictionaries and classical poems, may account, to a certain extent, for their universal use even in educated and cultivated society. At home we should marvel to hear a dinner-party of ladies and gentlemen suddenly lapse into the broadest Yorkshire or Somersetshire, and it is only an occasional 'original' who persists in retaining his or her country brogue. In Italy the resident stranger is accustomed to the appearance of the local dialect whenever the company becomes excited or confidential, and he generally has the sense to learn it, as otherwise he would be utterly unintelligible to the peasantry, and partly so to the lower order of citizens.

Italians, who hold to 'Italia una' as the first article of faith, consider the *diversitas linguarum* to be *non academica sed verè Babylonica*, and denounce the practice as an unmitigated evil. I am disposed, despite all sentiment, to agree with them. Differ-

ence of dialect tends to maintain a species of bi-lingualism, and history tells us that bi-lingual peoples have done next to nothing in literature, and very little in anything else. Sometimes a genius, like Milton, may write in Latin and Italian as well as in English; a Camoens may poetise in Portuguese and Spanish, or a Swinburne may be equally happy in French and English. These are rare exceptions—brains big enough to contain two and even three tongues. But the multitude has enough and more than enough to do with mastering one. It is not only race that has prevented Wales from producing a single writer, in verse or in prose, whose name has become a household word to the world; and sentimentalists who, like Mr. Gladstone, advocate the Eisteddfod, offer, methinks, the worst advice of their unreal and æsthetic school. The cultivation of local dialects is the strongest engine for maintaining those racial distinctions which the whole course of modern civilisation does its best to obliterate: the worst symptom in Jewish progress is their being constantly reminded of the words of Moses, 'separated for ever from all the people on the face of the earth.' Such a study was well for that divided land, that mere 'geographical expression' in which the

first Lord Lytton ('Last Days of Pompeii') found 'the only hope of Italy.' How potent the instrument may be found in political warfare, in alienating man from man may be seen in the battle of races at Trieste. The Italianissimi party, opposed to the Tedeschi and the Pan-Slavic, carefully supports half-a-dozen weeklies or flying-sheets written in the corrupt Venetian, dashed with a few words of Friulano,[1] which distinguishes the city of Charles VI. and Maria Theresa. Here we had or have, to mention only a few, 'La Baba' (the grandmother) which first appeared; 'El Portinajo'; 'El Poveretto'; 'El Rusignol' (the nightingale), which ceased to sing in 1873; and 'El Ciabiatin' (the cobbler. who also acts as house-porter), which has lately become 'El Triestin.' Its rival is at present the 'Gazzettino del Popolo.'[2]

[1] The borrowing from Friulano is mostly of words. For this dialect the curious reader will consult the *Poesiis de Pieri Zorutt* (Pietro Zorutti), published at Udine. Some of the poems are much admired and deserve translation: an especial favourite is the Anacreontic beginning

'Piovesine, fine, fine.'

[2] I know only two books of proverbs in the Triestine dialect: 1. *Dialoghi Piacevoli* of the (Canonico) D. Giuseppe Mainati, with map and letters of Mgr. Bonomo, which begin with the 16th century (1511), the whole translated into Italian (Trieste, G. Marenigh, 1828); and 2. *Saggio di Proverbi Triestini*, by Angelo C. Cassani (Trieste, Colombo Coen, 1860).

The 'Bulgnes' is one of the rudest of its kind, so 'tronco e mozzato,' (truncated and elided), that at first strangers, familiar with Italian, can hardly understand a word of it, especially when spoken 'stretto.' For instance: 'A n' vuoi t' m' in parl, S'gnor' or 'M'sier' (I won't have you speak to me about it, Sir) rapidly pronounced, sounds almost like one word. Again, 'Ai me ne seng meng brisa (io non ne so mica') with a double negative, in Italian an affirmative; and, lastly, to die is not *morire*, but 'andar in squezz' (to go *squash* or in dissolution). Yet it has its classics, such as the works of Dr. Lotto Lotti, which run through a multitude of editions; nor are collections of local poetry disdained by the learned of the present day. In the list of modern M.A.'s and Professors at 'Blogna,' or 'Bulogna,' I see that the Senator Conte Commendatore Carlo Pepoli published a 'Discorso Academico' upon the patriotic subject 'Di taluni canti dei Popoli.' The Professor of Italian Literature, Cav. Giosuè Carducci, has also printed, in periodicals, specimens 'Di alcune poesie popolari Bolognesi del Secolo XIII. inedite' (Bologna, 1866), and 'Di alcune rime antiche ritrovate nei memoriali dell'Archivio notarile di Bologna' (Bologna, 1872-73). There is a large quarto *vocabulario*, or dictionary of

Bolognese-Italian, and Italian-Bolognese, by Claudio Ermanno Ferrari (publisher, Nicola Zanichelli, Bologna, 1858; price 4 lire). My kind friend Prof. Gian Giuseppe Bianconi gave me three volumes, whose contents may not be uninteresting to the general reader.

The oldest is a rude little duodecimo of 158 pages, entitled 'La Togna, Commedia Rusticale, tradotta (it was originally in the Florentine dialect) dal timido Accademico dubbioso, recitata nella Villa di Fossolo, e dedicata all' illustriss. Signora, la Signora Alexandra Bianchetti, Gambalunga, ne' Zaniboni. Con Privilegio. In Bologna, per Giacomo Monti, MDCLIV. Con licenza de' superiori.' The imprimatur appears at the end, signed by the 'Archiep. Bonon. & Principe,' and by two members of the 'Inquisitionis Bononiæ.' The two opening sonnets, 'Felsina alla Togna,' and 'Sunnett fatt pr Caprizzi, in lod d' la Togna,' will give the measure of elision and truncation; for instance, in these lines—

> E s' in Fiurenza cun fadigh, e spes (fatigue and expense)
> Fù zà mustrà la gloria dal tò inzegn,
> Quì in Bulogna, und i Studi han al sò Regn
> T'harà gloria mazor, e più pales (more evident),

we may remark that the pronouns *me* or *mi; ti, lu, nù, vù,* and *lori* or *ei* are used everywhere between

Dalmatia and Bologna. *Mi* is remarkable for occurring in so many different and far-divided languages ; for instance, in Slav and Teutonic, where *mich* is older than *ich*. The Bolognese use *A* or *ai* for the first person, only where it would be emphatic. The elision of the last syllable in the noun (*medgh* for *medico*), in the infinitive (*guardá* for *guardare*), and in the participle (*battú* for *battuto*) is similar on both sides of the Adriatic. We have also the same omission of the liquids, as in *cavai* for *cavalli*, and *maraveia* for *maraviglia*.

The country girl La Togna (Antonia), daughter of Barba (Gaffer) Bigh (Biagio, Giles), is loved by Minghett d'Greguor, and she loves Sandrin, whilst she, or rather her father, is proposed to by Petronio.[1] The latter is a *zdatin* (citizen), speaking, of course, pure Italian, and compelled by the master passion to forget his *morgue* of the 17th century. Yet he cannot help quoting (p. 108)—

> Allo sprone i Caualli, al fischio i Cani
> Ed al bastone intendono i Villani.

The contrast of the dialects leads, in the unsmooth

[1] The name is intensely Etruscan, as we learn from the tombs of the Petruni family at Perugia. La Togna in the fisherman's dialect of Trieste would mean 'a float.'

course of courtship, to such *quid pro quo* as the following (p. 36) :—

Petr.—Non vedi, come per te languisco?
Togna.—Mò, ch' vien a dir languiss? D' gli anguill? (eels ?)
Petr.—Nò, vuol dir ch' io moro!
Togna.—Un Mor (Moor) bianch', ò negr?

Another *zintilhuomin*, also a citizen *pour rire*, is Cintio Musico, who writes songs for his friend; and the valet Malgaratin, the 'seruitore del cio di Petronio.' There are two ridiculous old women, Ze Drathie (Aunt or Gammer Dorothy), and Ze Betta (Elizabeth), who recite 'sympathetic verses' when La Togna faints under her troubles. After the usual *peripetiæ* of love and cross-love, caused by the 'Diaul dl' Infern,' the conclusion is happy. Petronio is forbidden by his family to wed a rustic: Minghett, after attempting suicide, consoles himself with Flippa, whose 'Padr' or 'Par' is Barba Pasqual. There is a general song and dance lasting through six pages, and Sandrin dismisses the audience before living happily with La Togna ever after. Here, evidently, we have a pre-shadowing of Goldoni in Florentine and Bulgnes, instead of in Venetian.

The next is a more ambitious production, and Professor Bianconi considers it the most correct in point of orthography—a trifle which, as in

Milton's day, has hardly been placed upon a settled basis. It is entitled 'La Liberazione di Vienna assediata dalle armi Ottomane, Poemetto giocoso; e la Banzuola, dialoghi sei, del Dottore Lotto Lotti, in lingua popolare Bolognese' (no date but 1746 in the last plate). We gather from the preface that the work of this citizen, 'a good Catholic,' has often been reprinted, despite the poetical licence of certain sentiments. It is an old-fashioned octavo of 248 pages, with 12 copper-plates, including a burlesque frontispiece, where Fame flogs a kicking Pegasus: the illustrations are curious enough for the costumes and views of the city in the last century. The dialect is mixed: in those days there were various phrases, pronunciation, accent, and proverbial sayings in the several quarters of the city, especially in those which, being nearest to, had most intercourse with, Romagna, Lombardy, and Tuscany. Moreover, the *filatoglieri* (silk-workers) had their own variety. Similarly we find at Venice two distinct dialects, one in the Canavecchio (Old Canal) to the north; the other in that peculiar region the Castello, south: the same is the case even in Rome, where the Trasteverini do not speak like their eastern fellow-citizens.

The first part (pp. 1–88) is entitled in Bolognese 'Ch' n' ha cervell ava gamb' (who hath no brains has legs), 'o sia La Liberazione di Vienna.' It is preceded by the normal sonnet 'Dal Sgnor Duttor Jacm' Antoni Buzzichell,' which ends thus :—

> Dla tò penna mì ammir la gran furtuna
> Ch' sà in t' un medesm temp, grav e burlesca,
> E battr sod (to hit hard), e andar sbactand la LUNA (to chaff the moon, *i.e.* the Crescent.)

The *poemetto*, relating the attack of Sulayman the Magnificent with his 300,000 men, is divided into five cantos, each preceded by its argument; and the following is a specimen of the first stanza, which opens like Ariosto :—

> A cant la stìzza, al fugh, gl' arm, e la rabbia
> D' qlor ch' in t' al nostr vlen cazzar i pj,
> D' qla zent qsì dsprpustà, ch' sempr s'arrabbia :
> O pr dir mìi d' qla maledetta znj
> Ch' aveva fatt pinsir d' grattarz la scabbia
> Ben ch' a n' aven' scador, prch' Damndj
> Ch' è sempr in nostr ajut, e in nostra dfsesa,
> I ammurtò la candela ch' era impresa.[1]

---

[1] I sing the wrath, the fire, the arms, and the rage
Of those who would thrust their feet into our country,
Of that folk so inconsequent, which is always in a fury :
Or, better to say, of that accursed brood
Which had thought to have scratched its itching,
Although without much chance, for the Lord (Dominiddio)
Who is ever in our aid and our defence,
Put out the candle which they had lit.

In stanza 4 of the same canto we have an expression which has lately been made world-famous by Prince Bismarck:

E ch' la s' avè da frìzr in t' al sò grass.[1]

The first canto marshals the Christian and the infidel forces, including 'Mustafà prim Visir,' the 'Bassàs' of various places—Mesuputamia, Bosnia, Damasc, and Alepp—Msìr Agha of the Gianizr, and others. In the second there is a dialogue between the Devil (Diavl or Belzebù), the Rè Pluton, and Povr Macumett, who is called to relate in presence of 'l' Deità ch' assìstn ai argumìnt' why the Turk attacks Leopold Imperator. Mohammed is opposed by a certain 'Squìzimbraga, un duttor'—the doctor, professor, or *savant* is, of course, a favourite gibe with the town *versus* gown, and the historic 'duttòur Balanzon,' who was a real personage of that name, still appears at every carnival. Macumett so pleases Pluto that he receives as a gift 'una furcà antigh, antigh.' In Canto 3 we have the siege and the sufferings of 'i puvr Chstian'; the 4th shows the relieving army of Sobieski (1683) guided by 'Gabriell Anzlìn

[1] And which had to fry in its own grease.

Bndett' appearing in 's' la muntagna d' Kalembergh,' and putting the Ottomans to flight. The 'Quint Cant' sings the triumph of the Christians.

E i Bulgnis al sò solit in dardella
Con al fugh portn' al cil l' ovra sì bella.[1]

The 'loot' is also carefully enumerated. The *pocmetto* has its merits, but it can hardly compare with the 'Rape of the Tub,' by Tassoni, whom Dickens ('Italian Notes') confounded with Tasso. 'La Secchia Rapita' proposed for itself the patriotic task of ridiculing petty feuds about nothing between neighbouring cities; and its admirable wit, intermingled with charming poetical descriptions, found a worthy echo in some of Byron's latest masterpieces.

The second part (pp. 93–248) is entitled 'Remedi per la Sonn, da lezr alla Banzola,[2] Dialogh Sj' ('cures for sleep, to be read on the bench or footstool, 6 dialogues'). It is addressed 'Alle Oneste Cittadine di Bologna,' by the 'Vecchietto,' Lotto Lotti, who quotes for their benefit 'Marc' Aurelio's'

[1] And the Bolognese, after their fashion, in great excitement
By their fiery valour raise their noble work to the sky.

[2] The *banzuola* or *banzola* is quite Bolognese, and corresponds with the *scamnum* or low stool of the Romans; it is also used for a bench.

saying: 'The retired life of women bridles the tongues of men.' The author was induced to collect the various 'bizzarie' of sentiment, sayings, and proverbs, by the example of Signor Carlo Maria Mazzi, who published learned and amusing comedies in the Milanese dialect. All the dialogues are in irregular verse, rhymed and unrhymed; the persons, men and women, vary from two to six. They have also their 'moral': No. I., 'Al Servitor,' teaches to distrust servants who are apt to chatter about the secrets of the house. No. II., 'Gropp,' e macchia[1] is a warning against gadding about. No. III., 'La Cantatriz,' encourages mothers to teach their daughters music and singing, but warns them against the cupidity of husbands who would make their children professionals. The music lesson (p. 159) is good :—

Crìcca (the 'Mestr').—Ossù, sgnora, ch' la vìgna
Zà dsen sù : *fa, fa.*

Sandrìna (Alessandrina, the pupil) sings :—

L' empio oggetto da me abborito
Trovi scherno, e non pietà!

Crìcca.—O vj sù alligrament.
Trovi sche-e-e-e,
Sandrìna.—*E-e-e-e non pietà.*
Crìcca.—*Pietà, sol, dò.*

[1] 'Far gropp' e maccia' (not 'macchia'), *i.e.* 'to do knot and stain,' is still a saying at Trieste when a man finishes off a business at once.

No. IV. dialogue, 'La Miseria,' bids the gude-wife save money against a rainy day, as husbands often go to ruin. 'Al Bagord' (*Le Noceur*), No. V., illustrates the saying of 'Dione Filosofo,' that 'la Donna civile non solo dev' essere onesta, ma non deve dar cagione alcuna, che in lei si sospetti mai cosa disonesta'—familiar to England through 'Cæsar's wife.' No. VI. and last is 'L' ippucondria,' in which the wife is taught how to treat a hypochondriac husband: 'Scannacapon ammalà' is relieved by the contrivances of 'Bunifazia, sò mujer' and Madò Pira, the servant-woman, rather than by the *medgh* (*medico*) and *spzial* ('pothecary). 'Finis' is preceded immediately by—

Pira.
Scann.
Bunif. } Baslaman a Sgnerj.

The author has succeeded in fulfilling the difficult promise of his preface (p. 96). 'In tale imitazione però ho proccurato, per quanto ho potuto, di scansare certi equivoci sporchi, ed indecenti di parole, che la favella Bolognese suol partorire, perchè, tolti da voi' (to the citizenesses), 'verrei ad offendere la vostra modestia, ed a svegliarvi quella verecondia, che sul vostro volto è la Rocca della vostra bellezza.'

The third is a little octavo of 96 pages, 'Poesí in Dialètt Bulgnèis D' Camell Nùnzi :' Bulògna, Stamparí Militar, 1874. It consists of sonnets, of various pieces, epigrams, &c., and, finally, of the sayings of Zé-Rudèll. Of the sonnets, the most amusing are the 'Matrimoni ed Iusfètt con la Rusalí' and the 'Pensir ed Iusfètt per la nascita d' un fiol d' zeinqu mis.' The unfortunate 'Balanzòn' also appears on two occasions, 'Pr' una strenna dèl Duttòur Balanzòn,' and 'Dscòurs fatt pr' al Duttòur Balanzòn.' Zé Rudèll discourses on various themes, such as 'in Lod dla Pulèint' (in praise of *polenta*, or porridge); 'in Mort d' un Toc' (*tacchino*, or turkey); 'in Mort d' un Oca,' and on the 'Manira d' cunzar l'insalâ' (to prepare a salad). The third (p. 58) begins with—

Dies iræ, dies illa.
L'Oca e morta e più non strilla
S' finé l' oli in dla luzerna,
Pace a lei, *requiem* eterna ![1]

In a rhyme (p. 61), addressed 'all' Illustrissem Sgnor Commendatòur Professòur Franzèsc Rizzol,' we find the following sharp political allusions (1866) :—

[1] The goose is dead and no more hisses,
Ended the oil in its lantern,
Peace to its manes, *requiem* eternal !

Arcurdav (he perceived) ch' fra i amalâ (sick)
Che l' Italia ha un mal in dl' ùter,
Ch' l' an s'andass mai a . . . . . .
Mo sperain ch' l' ha finirá
E d' sta pèsta guarirá (will be cured of this evil),
Tolt da Ròmma al mal Franzèis (Morbus Gallicum)
L' amalâ' l' sintrá manc pèis. (will not feel the worse).

The following is a specimen of the epigrams (p. 27) :—

Un Muntanar mandó a Bulògna un fiol (figliuolo),
Per cavari un Duttòur, mo l' imparó (but he learned)
Dòp zeinqu ann, che lù fava al lardarol: (that he was a *charcutier*)
Non ostant con al tèimp, al s' rassegnó,
Digand (saying), 'le mei (better) ch' al seppa frá i salam (salami)
Che un Asen (asino) frá i Duttur ch' as' mor ed fam.'

In these extracts from the 'Rem Bulgnèisi' it would appear that the modern dialect is growing broader, with more of the sing-song. For instance, 'duttòur,' with emphasis on the penultimate vowel, takes the place of 'duttor'; 'ztadein' of 'ztadin;' 'Bulògna' of 'Blogna;' and so forth. The same is noticeable in the prose; for instance, in the first sentences of the preface: 'Tùtt i liber dèl mònd hann una prefaziòn,' e la vrev (vorrei) avèir anca me. Le bèin vèira ch' an (that I do not) so da ch' banda em prinzipiar' (on what side to begin). 'A diró che la prefaziòn la fa l'effètt dèl Wermutt, dl' assèinzi, dl' amaròn e dl' antipast premma dèl dsnar (before dinner), ch' i preparen

al stamg (stomach) a dar una bona magna' (good feed).'

My kind friend, Dr. Bianconi, further obliged me with the following 'Detti popolari in dialett Bolognese':—

1. 'La più trista roda del car (carro) l' è quella qu' zirla' (strida)—said of the bad workman who complains of his tools, of much cry and little wool, and of the noisy and pushing mediocrity.

2. 'L' è sempre mei (meglio) rusgar (rossichiare, to gnaw) un os (osso) che un baston.' So the Triestines say: 'Meyo rosigar un osso che un baston.'

3. 'Quel sgnor l' a fatt tant armesa (armaggio, or preparations), e pó al s' en anda con el piv in tal sac.' So the Triestines, who must be visited in the highly Conservative quarter called La 'Rena (from the Roman arena or amphitheatre), have it: 'Se n' andato colle pive in sacco.' The *piva* is the bag, the *zampogna* is the pipe, of the bag-pipe, and when the former is not distended, the latter sinks into it. The meaning is our popular saying 'he shut up.'

4. 'An s' i pó diri una parola ch' el salta a la graná' (*alla granata*, that is *in furore*, or *si stizza*).

Trieste prefers 'Che ghe (gli) vegna (venga) la mosc' al naso' (the fly to his nose)—said of a man who has a peppery temper.

5. 'Fiol car (figlio caro) quand a' s' vol combinar un' affair, b'sogna dar un colp à la bott (a blow to the barrel) e un alter al serc' (*al cerchio*, to the hoop) —a cooper's metaphor for 'age quod agis.'

6. 'Eh! la srà abilità anch questa, d' mudar el rason cmod s' fa al bisacc' (*bisaccia*, scrip or satchel). This vulgar saying means that a man should be able to change his intentions as easily as he carries or deposes his (travelling) bag.

7. 'Avedi pazienzia (abbiate pazienza): al ien beli rason (they are good reasons), ma non caven un ragn (ragno, a spider) d'in t'un bus' (*dal buco*). The Triestine form is 'Nol caveria una maladeta (*i.e.*, cosa, not worth a d——) dal muro: so the latter, who make no difference between singular and plural verbs, say—

> E anche questi ve dig' in confienza (confidence)
> No i gaveva (essi non avevano) studià una maladeta.

8. 'Lù al dsiör mei (parla meglio) qu' un liber stiazzà' (*stracciato, lacero*). This 'chaff' to a man who talks like a (torn) book becomes in Triestino 'Lù (or el) parla meyo de un libro strazzà.

9. 'Al s' l' è giccia (egli se l' è gettata) dri dal spal (dietro le spalle) e bona nott;' in Trieste, 'El se lo ga buttà drio le spalle, e buona notte, Siori!' (Signori); applied to a man who gets rid of a business.

10. 'Cos' è mai sta pladour (*rumore*) ò a fai?' (What's the meaning of all this row?) The Triestines say: 'Cossa xe 'sto baccan (*i.e.*, baccanale) che fe?' In the terminal nunnation the stranger must be careful to pronounce the third liquid rather after the French nasal fashion (*bombon*), than the Italian and English (*man*): it most approaches the Spanish.

11. 'An basta aver rason, b'sogna trauer chi v'la daga'; in Trieste, 'No basta aver razon, ma bisogna trovar chi vi la daga'—it's not enough to be in the right, you must find people to believe it.

Since my last visit to Bologna Prof. Bianconi informs me that he has found one of the greatest rarities produced by Bolognese typography of the fifteenth century; it is one of the two only copies, the other being in Rome. The subject of the poem is the jousting, or tournament,[1] held at the venerable

[1] From the 'Trattato sopra le Gioste ed i Tornei del Senatore Berlingiero Sessi,' printed in the volume containing the 'Prosi degli Accademici gelati' (Manolessi, Bologna, 1671), we learn that the first tournament known in Italy took place at the old Etruscan capital in A.D. 1147.

city on October 4, A.D. 1470, by order of 'Giovanni (?) Bentivoglio, Signore della Città.' The author, Francesco Cieco of Florence, writes his 204 octaves in rather rude and rustic Italian. He enters into the minutest details concerning the sport; he describes the Piazza and the stockades with which it was provided; he records the various cities that supplied combatants; he relates how on one side the Bentivoglio chose 60 knights, whilst as many were opposed to them by Antonio Trotti di Alessandria, Capitano dei Bolognesi; he names the combatants; he notes the various modes of weapons, the harness, and the devices of the cavaliers, together with the ornaments of the fair dames, whose beauties he compares with the most famous charmers of antiquity; he narrates the order of the several gests, and finally he leaves the victory with the 'parte Bentivolesca.' This famous tournament was also described by Giovanni Sabbattino degli Ariendi (See Giordani's 'Almanacco Storico-Archeologico Bolognese,' 1836; and Antonio Bertolini's 'Eccitamento,' November, 1838, p. 685).

The Bolognese copy of Francesco Cieco, a small quarto, wants frontispiece, pagination, and index: the experts remember that about 1470 the

printing-press was introduced into Bologna by Baldazzarre Azzoguidi, and, remarking that the types are those adopted by this artist in his edition of Ovid (A.D. 1471), they have concluded that the poem was printed in the early part of the same year, or shortly after the tournament was held. Prudential reasons may be attributed to the suppression of the printer's name.

I here end my study of the venerable ex-capital of Northern Etruria, with the hope that readers will take kindly into consideration the circumstances under which it was written.

RICHARD F. BURTON.

WATSON'S HOTEL, BOMBAY: *Feb.* 15, 1876.

APPENDIX.

Résumé of a Letter addressed to Signor W. Helbig, by Cav. A. Zannoni, upon the bronze articles supposed to be razors (printed by the Bullettino dell' Instituto di Corrispondenza Archeologica, anno 1875. *Roma: coi tipi del Salviucci, a Spese dell' Instituto*), 1875.

YOU ask me in yours of the 19th inst. two questions:

1. *Have the supposed razors been found in the Felsina Necropolis?*

2. *If so, what objects accompanied them, or, to be more precise, did these implements occur together with pottery and bronzes of the primitive type, as, e.g., those of Villanova, or were they discovered with painted pottery and historical subjects in black and red?*

Before answering you, allow me to submit an outline of my discoveries in the Certosa diggings (1869).

I first found the four groups, numbering more than 400 sepulchres; the great series of figured pottery, black and red; the unique bronze *situla*; the many-figured *stelæ*, and the first specimen of Etruscan writing. The Certosa is, therefore, one great period in the life of Felsina, 'prince of Etruria.'

But, as was pointed out in my report of October 2, 1871, at the opening of the 'Museo Civico,' the Certosa 'finds' no longer form the isolated discovery from which I had deduced that, between our old monastery and Bologna, ran

a highway, with tombs grouped to the right and to the left, showing several and successive epochs—in fact, the development of Felsinean life. It appeared to me certain that the earlier inhabitants would have pushed forward their cemeteries from the limits of population, which, as my discoveries in the Strada Pratello prove, represents a part of the modern city; and this, too, not only westward, but to the other cardinal points. Evidently the citizens, increasing in numbers and subject to social and political changes, would deposit their dead in several and distinct groups along the road, at increased distances of a hundred yards or so; sometimes above, at other times around, those which preceded them. And therefore I expected to find at least ten roadside groups between the two extreme points, Bologna and the Certosa.

The fact of eight such groups coming to light have proved my conjecture to be correct. Besides the four in the Certosa proper, 1869, I discovered to the eastward—that is, in the direction of Felsina—two more, below the Arnoaldi property (end of September 1871); a seventh, distributed under the Arnoaldi-Tagliavini farms and the Certosa lane; and, finally, an eighth (mid-August 1872), in the Benacci estate.

The Tagliavini find demanded fresh researches in the contiguous Arnoaldi property, which presently yielded another group. The first, of thirty-six sepulchres, produced very few figured vases, with red pottery, *fibulæ* of bronze and silver, and the remains of two cists. There were some sculptured *stelæ*, far inferior in splendour to those of the Certosa, but two had an especial value, on account of their Etruscan inscriptions. This group, therefore, has the characteristics, without, however, the importance, of the four which compose the Certosa find.

The sixth group (Tagliavini property) produced, as

first-fruits, four sepulchres, containing three skeletons, with brown and red earthenware, and a *dolium* worked in bands: its contents were burnt bones, silver *fibulæ*, and a bronze knife. But it was a spark that kindled a mighty flame. The adjacent Arnoaldi diggings, begun in early December 1872, were continued till the end of June 1874, and have already yielded 150 tombs. Here we gathered, besides the brown and ruddy earthenware, a rich harvest of pottery with *graffiti* geometrically worked in a large and grandiose manner, and not wanting the usual ducks, the doves, and even the monkey; a great variety of bronzes, such as *fibulæ*, and utensils, *situlæ*, cups, two cists in *repoussé*-work with bands and points, and, finally, a sculptured *stela* with rosetted crosses, resembling that of Pisaro, consequently, those of the Certosa.

During last summer (1874), the lane which separates the Arnoaldi and Tagliavini diggings, explored by me at the expense of the municipality, produced eighty most important tombs; and the axis of the line apparently corresponds with that of the cemetery, which extends on both sides under the two farms. Here, more remarkably than in No. 2, Arnoaldi group, emerged the luminous epoch of Villanova, far richer sepulchres, proved by the engraved potteries and bronze utensils; two banded cists, two others of *repoussé*-work with bands and points, and two with representations of quadrupeds like the far-famed *situla* of the Certosa, not to speak of the number and beauty of the *situlæ*, the large bronze pins, the bronze vases, and the utensils whose forms show remarkable novelties.

The other Arnoaldi group (our No. 7) has yielded hitherto sixteen sepulchres, identical with those of the Certosa; a large *oxybaphon*, a few other red-figured potteries, also in the style of what we found at the

monastery; a *stela* and the fragment of a second with a bit of inscription.

But the history of Felsina returns to its origin in the vast Benacci group, discovered in September 1873. Here 300 tombs show four epochs distinctly marked by their stratification, namely:—1. An age preceding Villanova (Pelasgian?); 2. The first era of Villanova (Umbrian?); 3. Gallic; and 4. Roman.

The pre-Villanovan epoch appears splendidly in the five sepulchres, which I will presently describe; in earthenware with peculiar *graffiti*, and in special bronzes for utensils, arms, and ornaments.

And now comes the first Villanovan age, with some engraved potteries and others whose type has not hitherto appeared; with an extraordinary quantity and variety of *fibulæ*, *armillæ*, and bronze pins; with bronze vases, amongst which six are banded, some are worked with *repousse* points, and one cist, festooned in *repoussé*, bears little geese like those stamped on the earthenware. The so-called *tintinnabula* yielded by Villanova here appeared in greater numbers; they are evidently not bells, but articles of toilette.

The Gallic epoch has offered various very long sword-blades, like those from the tumuli of Magny-Lambert; and bronze vases resembling the discoveries of Upper Alsace ('Aus'm Werth der Grabfund von Wald-Algesheim'; Bonn, 1870). For our present purpose I need not note the Roman age.

Here, then, are the successive peoples and life-periods of Felsina—Pelasgic, Umbrian, Etruscan, Gallic, and, finally, Roman. The lower Benacci group shows the pre-Villanovan (Pelasgic?) and the early Villanovan age. The Arnoaldi-Tagliavini and the Certosa lane record the luminous epoch of the later Villanova; the second stratum proves the influence of the coming age, gradually

deteriorating in the first Arnoaldi group. In the third it again rises, and it culminates in the four Certosa groups.

After this sketch of my discoveries, I proceed to your questions concerning the so-called 'razors'; and let me at once state that the obtuseness of the edge, and the small size of the articles, forbid our attributing such use to them.[1]

These lunated articles were found only in one part of the Certosa, the Campo degli Spedali, scattered over the sub-surface; none appeared in seven of the groups: the four Certosan (proper), the two Arnoaldi; and the Arnoaldi-Tagliavini and Certosa lane. The Benacci diggings, however, yielded 'razors' in nine tombs, of which five belonged to the pre-Villanovan (Pelasgic?), and four to the early Villanovan epochs. The following is a succinct description of the articles and their accompaniments.

Of the four early Villanovan tombs which yielded 'razors,' No. 1 was a square fosse (0·70 mètre × 0·70 mètre), containing the large cinerary urn of Villanovan type, with burnt bones, covered with its cup; to the northwards were some small brown and red pots, one of them engraved round the rim with a zig-zag ornament, and with horizontal channellings from mid-belly to bottom. A three-barbed *fibula* of bronze and the 'razor' were found with the bones.

No. 2 fosse was somewhat larger (1·00 mètre × 1·00 mètre); to the east stood the great ossuary (same type), with engraved *fibulæ*, pins, and fragments of *armillæ*, all of bronze; westward lay some smaller brown pots; and a terra-cotta cist with bands still stood upright. The 'razor' lay flat in the middle of the western side. It is not plain, each face has three zones cut parallel with the blade-back;

[1] NOTE BY THE TRANSLATOR.—After seeing the Chinese blades, little hatchets, I cannot attach importance to either of these objections.

the uppermost is straight, the central is a zig-zag, and the lowest is in short and parallel perpendicular lines.

No. 3 fosse was of the same size as the second. The ossuary (same type) was subtended northwards and southwards by brown and reddish pots; there were only traces of bronze *fibulæ*, and amongst the burnt bones lay the 'razor' engraved with parallel lines along the back.

No. 4 was a little smaller (0·90 mètre × 0·90 mètre), than the two latter. The ossuary had its cup-cover, and near its mouth was a three-barred *fibula* like that of No. 1; westward lay a few small vases, of which one was zig-zagged in relief at the rim. Upon the burnt bones of the ossuary stood a few engraved *fibulæ* and some bronze pins. Among the bones was the 'razor,' much oxidised.

In these four cases, then, the 'razor' is always inside the ossuary; it is accompanied by *fibulæ*, bronze pins, brown and red earthenware, and a few engraved potteries. It remains to consider it in connection with the pre-Villanovan (Pelasgic?) age.

No. 1 tomb was walled with slabs of *molassa* or yellowish sandstone; the inside (1 mètre × 0·70 mètre) showed a cup-covered ossuary, engraved after the Grecian fashion. Upon the bones lay the 'razor,' together with certain twisted bronze *fibulæ* of novel form, and the last found was a very long pin, also of bronze.

No. 2, similarly walled, showed the great ossuary opening to the north-west. It was similarly worked, and covered with a cup, also engraved, upon which lay an amber-headed bronze pin. With the bones were fragments of *fibulæ*, armlets, and a bronze *ligula;* at the southern angle lay three small bronze rings; and to the north, on a level with the belly of the ossuary, stood the 'razor,' worked with 'wolves' teeth' near the blade-back.

No. 3 was stopped by a large pebble, under which,

with its mouth opening south, lay the main ossuary, cup-covered and adorned under the lips and around the belly with Grecian tracery in white. Beneath this urn appeared a pin, and to the east a small bronze celt with cylindrical socket (*a bossolo cilindrico*). Little rings of the same metal lay below it. Mixed with the bones was a *ligula*, broken into very small bits, and two *fibulæ* with amber; finally, at the bottom of the urn the 'razor' lay flat, worked like that of No. 2.

No. 4 tomb resembled Nos. 1 and 2, but it was much richer. A rectangle of 1·00 mètre × 0·70 mètre, its sandstone revetment formed a fallen cover for the ossuary, whose mouth was turned southwards. Both it and the cup had large *graffiti* in the Greek style. Among the bones were two large bridle-bits of bronze, with their respective belongings;[1] a pin and engraved *fibulæ*. Near the rim was a little bronze *paalstab* (axe), like those of Scandinavian type, and then the 'razor.'

No. 5 was covered with a large revetment of sandstone. Underneath it stood the cup-covered ossuary turned southwards. The burnt remains were accompanied by a long cylinder of bone, worked in straight lines after the Greek fashion. To westward lay flat a very large and peculiar *paalstab*, whose faces were engraved also after the Greek way, with triple zones in zig-zag and with toothed lines. On the south was an unusually long pin with amber under the head, and near it lay the 'razor.' The latter is peculiar in its greater size, in its shape, and in its ornamentation. It is especially noteworthy for the part between the back and the handle; and each face is engraved near the blade-back with Grecian ornaments like the *paalstab*, the lowest being a zig-zag zone.

[1] TRANSLATOR'S NOTE.—In the original 'la relativa bardatura,' which means the whole harness or equipment of the horse—evidently not intended here.

Such, then, are the five pre-Villanovan (Pelasgic?) sepulchres containing the 'razors.' The principal accompanying objects are, as I have shown, urns with large *graffiti*, celts, *paalstabs*, *fibulæ*, and pins differing from those of the early Villanovan era.

Under different circumstances the 'razors' were also found in three tombs explored by my excellent colleague, Avvocato Arsenio Crespellani (see his paper 'Di un Sepolcreto pre-romano a Savignano sul Panaro;' Modena, 1874). He discovered one adorned with 'wolves' teeth' in a sepulchre which has all the characteristics of the Benacci group, of older date than the Villanovan; and the two others in tombs which belong to the first Villanovan epoch.

INDEX.

ALB

ALBA Longa, foundation of, 161
Albanian language, the, 164 *note*
Albano crater, first eruption of the, 160
Aldovrandi cited, 153
Alphabet. *See* Etruscan
Amorini estate, discoveries on the, 79
Ampère, J. J., cited, 71
Anthropology. *See* Man, Palæontology, Craniology, Italy, Bologna
Antiquities. *See* Etruscan
Apennines, configuration of the, 4
Apuleius cited, 43
Aria collection, 48, 109; villa, 109, 110, 112
Arnoaldi diggings, 95, 266, 267
Aryan, derivation of the word, 163; language, 217
Aryo-Pelasgi, emigration of the, 165, 168; in Italy, 169
Asnie, Torr dai, 82

BACTRIANA, one of the earliest seats of civilisation, 164
Basques, the, 164
Bassi, Cà di, tombs of, 107
Bedawin, the, 216
Bells, Etruscan, 68; Pagan and Christian, 69

BOL

Benacci diggings, 93; tombs, 268
Bianconi, Prof. G. G., 45, 258
Birch, Dr., 223, 224, 225
Boccadelli estate, intended excavations on, 106
Boii, the, 200
Bologna, excavations in, 3; its site, 4, 5; characteristics of, 6 *sq.*; modern improvements, 7; clubs and newspapers, 8; statue of Neptune in, 9; mediæval and modern, 10; its contadini and aristocracy, 11; University, 12; Anthropological Congress of 1871 noticed, 12, 28, 45, 72, 85, 122, 123, 126, 129, 149, 150, 157, 175, 177, 178, 180, 183; antiquarian researches, 14 *sq.*; the city of Felsina, 18; of Bononia, 19; the Via Emilia, 20; collections of Etruscan antiquities, 21 *sq.*; museums, *ib.*; discoveries near, 79 *sq.*; antiquarian factions, 82; Tortorelli excavations, *ib.*; Pradello diggings, 85; scavi della Porta S. Mamolo, 88; della Strada S. Petronio, 90; of the Certosa and Casalecchio, 93 *sq.*; ancient inscriptions, 239; introduction of the printing press, 262

BOL

Bolognese, the modern dialect, 242 *sq.*; its classics, 246 *sq.*; proverbs, 258
Bonaparte, Prince Lucien, cited, 213, 214
Bononia, ancient city of, 19
Broca, Dr. Paul, his classification of skulls, 176; cited, 197, 204, 219
Brock, Mr. E. W., 48
Bronzes, Etruscan, 33 *sq.*, 38 *sq.*, 60, 65 *sq.*, 67, 71, 160; Cav. Zannoni on, 265
Busk, Prof., cited, 153

CALABRESE superstition, 35
Calari, Signor P., his discovery of Etruscan remains, 79
Calori, Prof. L., cited, 73, 88, 91, 168, 187, 210, 211; his craniological researches, 187 *sq.*; on the Etruscan religion, 191; language, 193; civilisation, 195; general conclusions, 208 *sq.*
Calvert, Mr. F., on the antiquity of man, 150
Cantalupo Mandela, skulls from, 179
Capellini, Prof. G., cited, 61, 140, 141; originates the Bologna Congress, 177; on cannibal remains, *ib.*
Casalecchio, excavations near, 104. *See* Certosa
Cato, Major, cited, 18
Cavedoni, M., cited, 26
Celts. *See* Kelts
Ceramic art, Etruscan, 219
Certosa, excavations at the, 22 *sq.*, 93, 95, 97; plan of, 98, 101, 265 *sq.*; antiquity of, 143; skulls, 197, 204, 210; inscriptions, 234
Chabas, M., cited, 15
Chierici, Abbé, cited, 130, 131
Cieco, Francesco, Bolognese poem by, 261

ETR

Conestabile, Prof., cited, 28, 29, 44, 53, 73, 117, 139
Corssen, Prof., cited, 194, 228, 231, 236
Craniology, 175 *sq.*; palæolithic and neolithic skulls, 175, 176, 179; skulls of the Bronze epoch, 178, 180; of Villanova and Marzobotto, 180 *sq.*; of Sardinia, 184; Oscan and Etruscan calvariæ, 185, 186; Prof. L. Calori's researches in, 187 *sq.*
Crawford, Lord, cited, 39, 224
Cremation, Etruscan, 101, 139
Cyprus, discoveries of General di Cesnola and Mr. Lang in, 124

DAHOME, skulls from, 199
Davis, Dr. J. B, 185, 186, 189, 197
Dawkins, Mr. W. B., cited, 153
De Jorio, cited, 53
De-Lucca, excavations of Cav. F., 94
Dennis, Mr., his 'Cities and Cemeteries of Western Etruria,' cited, 23, 63, 91, 118, 120, 124, 129, 217, 220, 222, 226
De Rossi, discoveries of, 158
De Rougé, M., cited, 15
Desor, M., cited, 131
Dozza, Signor G., his discovery of Etruscan remains, 79

ELBA, skulls from, 178, 180
Ellis, Mr., cited, 228, 229
Etruria, early settlers of, 15 *sq.*; federations of, 15, 18, 191; modes of sepulture in, 17, 141, 172 *sq.*, 191
Etruscan antiquities, collections of, 21 *sq.*; rings, cysts, &c., 23

tombstones, 29 *sq.*; pottery, 32; bronzes, 33; stone implements, 35; cylinders, 36; bone dice, 39; toilette articles, 40; vases, 42; the Villanova collection, 48 *sq.*; burial of the dead, 55, 131, 139; discoveries on the Via Æmilia, 79 *sq.*; mortuary feasts, 83; graffiti, *ib.*; the Malvasia calves, 84; discoveries at Pradello, 85; the Mamolo 'find,' 88; legend of the Creation, 92; Certosa and Casalecchio, 93 *sq.*; fosses at the Certosa, 100 *sq.*; Marzabotto, 109 *sq.*; Misanello, 112; funerary wells, 115; necropolis of Misano, 127 *sq.*; varieties of sarcophagus, 137 *sq.*; animal remains, 140; alphabet, 173, 209, 237; skulls, 175, 187 *sq.*, 201; religion, 191; inscriptions, 233 *sq.*

Etruscan language, origin, theories, and affinities of, 193, 210 *sq.*

Etruscans, their first settlements in Italy, 172 *sq.*; their rule, 174

Euganean tombstones, 28; language, 194

Eugano-Veneti, the, 168

Eugubine Tables, versions of the, 15

FELSINA, Etruscan city of, 3, 18; remains of, 81, 97; skulls of, 205 *sq.*; necropolis and city, 208; epochs of, 268

Frati, Cav. L., relics found by, 97

Freeman, Mr. E. A., cited, 166

GAMBA, Cav. A., on Etruscan craniology, 182

Garbiglietti, Cav. A., cited, 182

Gellius, A., cited, 43

Geology of Italy. *See* Italy

Gozzadini, Count, his collection of antiquities, 48 *sq.*; cited, 56, 57, 60, 61, 83, 85, 89, 110, 111, 114, 118, 129, 134, 143, 144, 180

Græco-Pelasgi, their arrival in Italy, 170; decay of, 172

Greville, Mr. ('Memoirs'), cited, 242

Grotefend ('Zur Geographie von Alt-Italien'), cited, 168

Guernsey, catacombs in, 74

HERNICIAN valley, the, 159

Hincks, Dr., cited, 190

Horace, cited, 60

Hunfalvy, Prof. P., cited, 16, 24

ITALY, rivers of Upper, 4; modes of sepulture of the Etruscan settlers, 17, 55, 131, 139; geological history of, 149 *sq.*; Lower Pliocene epoch, 150; Diluvial epoch, 151; primitive man, 152 *sq.*, 157; Glacial epoch, 154; Alluvial epoch, 155 *sq.*; eruptive eras, 159 *sq.*; modern epoch, 161; immigration of the Lithuano-Slavs, 168; aborigines, *ib.*; influx of the Umbrians, 169; of the Latins, 170; of the Græco-Pelasgians, *ib.*; of the Pelasgo-Tyrrhenians, 172; of the Etruscans, *ib.*; cannibalism in, 177; craniology of ancient, 175 *sq.*, 179 *sq.*

JUVENAL, cited, 55, 63

KARNAK Inscription, noticed, 15

KEL

Kelts, emigration of the, 164; their wide extension, 165
Kistvaens, 52, 53, 75, 80, 86

LANGUAGE. *See* Etruscan
Latins, their first appearance in Italy, 170
Latium, first cities of, 159; volcanoes in, 160 *sq.*
Liano, discoveries near the Comune di, 81
Lithuano-Slavs, emigrations of the, 167
Livy cited, 161
Lotto Lotti, Dr., his Bolognese works, 246
Lucretius cited, 160

MAINA, skulls of Torre della, 180
Malvasia calves, the, 84
Mamolo, discoveries near the Porta S., 88
Man, præ-historic in Italy, 15, 150, 152, 157, 159, 164, 179; early civilisation and emigrations, 164 *sq.*; the Kelts, *ib.*; Aryo-Pelasgi, 165 *sq.*; Scandinavo-Teutons, 166; Lithuano-Slavs, 167; waves of immigration in Italy, 168 *sq.*
Mandela, Cantelupo, skulls from, 179
Mariscotti estate, discoveries on the, 80
Martial cited, 37, 62, 66
Marzabotto, discoveries at, 109; prevalence of cremation at, 139; antiquity and remains of, 143; skulls from, 180, 181, 182, 183; inscriptions, 238 *sq.*
Matray, relief of, 35
Misanello, discoveries at, 112 *sq.*;

PIL

an Etruscan house at, 114; funerary wells, 115; temples, 119, 121; aqueduct of, 123; skeletons, 124; group of Mars and Venus, 125
Misano, necropolis of, 127 *sq.*, 135 *sq.*; bronze weapons, 129; thoroughfares, 132 *sq.*
Montegazza, Prof. P., cited, 183
Mortillet, Gabrielle de, cited, 59, 131, 144; on the tombs of Villanova, 73
Moslems, mode of sepulture of, 101
Müller, Max, cited, 71

NICOLUCCI, Prof., cited, 64, 150, 178, 181, 182, 186
Niebuhr cited, 71, 195
Nunzi, Camell, Bolognese poetry of, 256

OVID, cited, 55, 69
Orioli, Prof., cited, 72
Owen, Prof., on the conformation of the Egyptian eye-aperture, 122

PALÆONTOLOGY of Italy, 149; the Romans not ignorant of, 152; first traces of Italian man, 153. *See* Italy. Man
Palmaria island, Pigeon grot of, 140
Parker, Mr. J. H., cited, 71
Pelasgo-Tyrrhenians occupy Italy, 171
Pelloutier ('Hist. des Celtes'), cited, 165
Phœnicians in Italy, 194
Pila, Monte, first eruption of, 160

PLI

Pliny cited, 35, 81, 171, 172
Pontecchio, remains in, 80
Ponzi, Senator, cited, 149, 153, 157
Pradello, Etruscan remains found at, 85
Propertius cited, 32

RAMONTE, Etruscan remains at, 80
Religion, Etruscan, 191 *sq.*
Reno, River, 103, 111
Rome, German myth theories concerning, 71 ; dialects in, 250

SARCOPHAGUS, varieties of Etruscan, 125, 137
Sardinia, ethnography of, 184, 186
Scandinavo-Teutons, emigration of, 166
Schio, Count G. da, cited, 28, 36, 37, 194
Sempronius cited, 18
Sepulture, 17, 55, 131, 139, 141
Sgarzi, Prof., cited, 34, 57
Silius Italicus cited, 172
Skulls. *See* Craniology
Smith, Mr. George, his discoveries in Assyria, 91, 92
Sogdiana, one of the earliest seats of civilisation, 164
Spedali, cemetery of Campo degli, 97, 98
Strabo cited, 171, 172
Suetonius cited, 152 *sq.*
Suidas cited, 91, 92

TAGLIAVINI diggings, 266 *sq.*
Talon estate, explorations of the, 103, 104
Taylor, Rev. I., on Etruscan temples, 119 ; cited, 195 ; his Etruscan Researches, 210 *sq*
Temples, Etruscan, 119 *sq.*, 121
Thucydides cited, 168

ZAN

Tignoso, Monte, skulls from, 176
Tombs, Etruscan, 22 *sq.*
Tortorelli excavations, 82
Turanians, their creed, 216
Turscha, the, 172

UMBRIANS, their influx into Italy, 169; skulls of the, 198 *sq.*

VARRO cited, 173
Velsina. *See* Felsina
Venice, dialect in, 250
Via Æmilia, discoveries on the, 79 *sq.*
Vibrata valley, 85
'Vienna, La Liberazione di,' Bolognese poem, 250
Villanova collection of remains, 48 *sq.*; accounts of, *ib.* ; tombs and skeletons, 50 *sq.*, 269 ; pottery, 56 ; ossuaries, 58 ; clay spindles, 59, 70 ; bronze articles, 60, 65, 67, 69, 71 ; toilette articles, 62 ; war implements, 64 *sq.* ; novacula, 66 ; tintinnabula, 68 ; idol, *ib.* ; tombs, 72 ; great antiquity of, 141 ; skulls from, 180, 181, 182, 183 ; inscriptions, 233
Virgil cited, 55, 171, 180
Vogt, Prof. Carl, 72, 177, 178, 181, 213

WELLS, Etruscan funerary, 115 *sq.*, 130

YULE, Colonel, on Aryan etymology, 223

ZANNETTI, Cav., on Etruscan inscriptions, 235
Zannoni, Cav., his excavations, 22 *sq.*, 97 ; cited, 39, 46, 87, 88, 127, 235 ; on Etruscan bronzes, 265 *sq.*

LONDON : PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET