NOTES ON THE CASTELLIERI OR PREHISTORIC RUINS OF THE ISTRIAN PENINSULA.

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PART I.—Preliminaries.

With great pleasure I propose this subject to my fellow students of the London Anthropological Society and to the readers of our young *Anthropologia*. The very existence of the Istrian Castellieri is, I believe, as yet a secret to England. Indeed, the well-known authority on "Rude Stone Monuments," James Ferguson, writes to me as follows:—

"So far as I know, nothing is known of your Castellieri. A description would be interesting and important, as showing that they are or are not connected with the Nuragic of Sardinia, or the Torri del Gigante of Malta and the Balkanis. The Mediterranean Islands, in fact, contain many strange antiquities, of the origin of which we know nothing, and we must wait till congers are found for us on the continent of Europe.

At the northern extremity of the Adriatic Gulf (More Superum), where ends the waterway channel representing the throat of the Mediterranean mouth, lies a little triangle of land, in shape much resembling a uvala. This is Istri. The exact dimensions and limits of the little peninsula are 116 kilometres from the northern base line (N. lat. 45° 33' to the southern apex, the flattish lumps, known as Punta de Premontore (N. lat. 44° 45'): 49 kilometres expresses the greatest breadth from the eastern flank Monte Maggiore (E. long. G. 14° 15' in round numbers) to the port and acting capital, Parenzo, on the west (E. long. G. 13° 33'40'). The extensive seaboard covers 193 linear kilometres, and the land frontier 99, running from north-west to south-east. The whole peninsula measures 274 and the area 3,410 square kilometres; the parallel of N. lat. 45° passing through it. With a sea frontage nearly doubling the land frontier, and with an average altitude of a thousand feet above the sea, Istri enjoys a delightful climate, except in the rare spots where the redoubtable Bora (Boreas), the gift of the frigid Carso and the Sava Valley, attracted by the warmer air of the Adriatic Gulf, invades the genial lowlands. Its choice position must have rendered it, in early times, a fit habitation for an unadventured man, who would naturally prefer it to cold and sterile Krain or Carniola, locally called Cragno, its limittrope to the north-east and east. The neighbourhood of the sea supplies its coast with winter rains, while the calcareous cretaceous formation, which discharges its drainage through crevices and hollows


THE CASTELLIERI OF THE ISTRIAN PENINSULA.

into the sea, where fresh-water springs, locally called "Pola," or "Polle" abound, subject the interior to summer droughts. These will be remedied by our new system of Venice and the Istria or tanks of Hindostan. Faisto or Faccarelli, dogi of Venice, in his poem the "Dintamondo," iiii. 2, justly says:—

"Ed Istria vilid come nel mar nova."

"And Istrian land I saw broad over the sea."

The late Dr. Kandler, of Trieste—concerning whom more presently—describes his natal country as follows:—

"He who looks upon this region from the seaboard admires the regular and beautiful forms of the highlands, the fertility and the glorious vegetation of the difficulty in understanding the high prairie (leisured upon it by Carpienisci, Nat. from the interior, compelled to traverse a succession of ground waves, whose northern slopes are not unfrequently naked and sterile; worried and confused by the multitude of tumultuous shapes, and every feature presents to the wanderer advantage. Unable to perceive the general plan, they hastily judge the country according to houses, the coast, harbours, the rich vegetation of the shores, the sailing fields, the frequent towns, and the monuments of antiquity, too many accidents which fortune has cast like waves and strays upon its coast."

Thus we have a complete contrast with the Libanius and the seaboard of Syria and Palestine, whose beauties must be beheld from above; those who cruise by the "Holy Land" see little but steps of dry wall, supporting in endless succession the several terraces, and effectually concealing the rich vegetation which they defend from floods and earth-slips.

When first coasting along the shores, and even when inspecting the maps, travellers are apt to suspect that Istri is an exception to the rule of the earth. In all great triangular peninsulas, whose apices point southwards—India, for instance, to quote no other—

"Pola," the great naval arsenal of Austria, is popularly derived from "Pikta Julio," a mistake. Strabo uses the word πόλης and Pliny (Nat. Hist. iii. 23) speaks of the "colony of Pola, now Piazza Jutia," though Strabo, with the significations of a sweet-water spring in the sea, a very common feature along the Mediterranean shores. My kind friend, the learned Cavaliere Tommasini, of Trieste, and Baron Carli von Calenbo (junior), both assure me that the word is derived from the Latin pellis or pellis, and the former adds, "La langue Romane de l'Occident et l'Italienne conservent presque sans exception les voyelles doubles de la langue classique." To which my reply is, that this word πόλης δύο μελοκράνησι (ii. 10). Secondly, I have heard the word pronounced, even Istrians into captivity, lost a remnant of the aborigines, and possibly Thracian, we may find analogies in the Keltic dialect of the Albanians, the direct proper names of the ancient Greeks. So in Irish, "Pola" is a hole or pit, with Corrigan's Welsh Pwll, Armughe Pwll, Gaelic Puli, and Manx Poull all equivalent to our pool, pond or puddle.

† P. 10, "L'Istria," &c.
the sides are bounded by Ghata or lateral ranges, flanking an inner basin or tableland of low elevation. The lesser features, like Sinai, present a smaller V of highlands, enclosed in a much larger trigon of lowlands, e.g. W. A view from the sea suggests that Istris has a regular slope from the lofty north-eastern, eastern, and south-eastern frontiers, the Slavnik (Fajun) block, the Cie mountains, and the Monte Moggiova, alto della Calzana. Hence Pliny, in his pregnant style, writes "Istris ut peninsula excurrat" (Nat. Hist. iii. 23). And native geographers have considered it as a buttress of the Julian Alps. It is described in detail by Nasonio, Monte Ri or Reggio, and those Albanus or Albinus, known as the Monte Novoso or Scrodder. Pliny (Nat. Hist. iii. 19) in a passage evidently corrupt, tells us, "Some writers have stated that its length is 40 miles (M.P. xli.), and its circumference 135 miles (M.P. exxv.) The same as to Liburnia, which adjoins it, and the Piazzia Gulf, while others make it 225; others again, make the circumference of Liburnia 180 miles." The words in italics may also be read, "And the circumference of Istris which joins it with the Piazzia Gulf, some make 225, while others make the compass of Liburnia to be 180 miles." Strabo (vii. 5, § 3) gives the whole voyage along the coast of Istris at 1,300 stadia, or about 152 miles.

In the charts we find four great valleys in the Istris centre, debouching upon the sea—one to the north-west, two to westward, and another to the south-west. The first is the Dragugga, whose delta, in the south-west, is a meadow land and Salinas. The second, which divides the peninsula in two, takes a variety of names, e.g., Val Quetio at the mouth, and Val de Montuna higher up: it is the only stream in Istris that deserves the name of river—the little Risanio is a mere brook—and that can carry to the Adriatic the rich growth of timber lining its banks. The third and fourth, the Val de Lemu (Culleus Limenis) and the

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THE CASTELLIERI OF THE ISTRIAN PENINSULA.

Camile and Val d’Arca (the classic Arnia, which divided Italy from Liburnia) are deep and precipitous Wadys, Timmaras, or ravines of limestone in the upper part, and in the lower true Fjords. It is not till the geographer has inspected the interior that he finds a true basin, mostly of green and rusty sandstones, locally called tasello (Morgel Sandstein) and interluco (quartzites and intercalations), which contrast so sharply with the grey limestone. Beginning immediately beyond the old town of Cetina or Cilicia, the Roman Cetina (l), this hollow, in places later cut by high dividing ridges, extends for about 6 miles, that is, about 3,500 feet, towards the town of Cetina, in which Cetina (i) is approached nearwards by ridges averaging 1,500 feet in height. In places it is only 500 feet above sea level, and the four water-courses, like the African giants, must break through the rocky rims of the basin before they find their way to the Adriatic.

Our peninsula is doubtless inhabited in early ages, and local students still trace in its modern Veneto-Italian speech remnants of the old Illirian Istris or Istri, whose dialect has been vaguely connected with Etruscan, Umbrian, Euganeum, Ilyrian, Keltic, Greek, and Phoenician.* The Carini held the Alpe attica, which, extending from the Tricono or Triglou (Tri-glav), to the Name, finally forms the “Carso,” they and owned Cordiscia, Aquileja, and Trieste, the modern Trieste (i). The Ilypides, or Ilapides, occupied the lands between the Name and the Mons Albinus or Albinus, upon whose eastern flanks they came in contact with the Liburni.* About B.C. 600, certain Gallo-Keltic tribes who

* We read in "L’Istris" (p. 12), “In tutto il resto della Provincia, prevalgono dal sec. xiv e xv, in poi il dialetto Veneto, ma non esiste se non esisteva una cultura, una sorte di liceo del dialetto originario Istriano, in primo, in Muggia a Piazzana, a con la moderna Trieste, e nell’intorno, fenice alle alture di Corpo, alcune interiezioni appassionate, nel linguaggio che si adopera con i bambini, e in modi stenosi di parola, rendendo la parola in alcun caso adiuvatrice e dirigente. A coltura di forme di tipo di carattere, a disposizione si hanno anche, e le Istriani sono ben capace di modificarli. Io spero che si siano sentiti colpite e presso l’intero del nostro equipaggio.”

+ The origin of this word is disputed. A. v. Martol (“Ueber die Geologischen Verhältnisse von Istrien, &c., aus den Naturgeschichtlichen Abhandlungen,” Band. 1, Teil. a, 257) proposes to derive Karst and Carso from the Slavonic Krat, the name of a mound near Osor, and probably the root of Carso, karst, which is found in the Karst region and Karst, the name of a stone, etc.

† The Caselle or “Scrodder” of Pliny is the source of the Alpe and the Arca. It was marked by a mound, the top of which was probably the site of a fort. The name is derived from the Latin Arsus, Arca, the name of a Greek place in the Alpe region.

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had accompanied Bellosunis occupied the Ores* (the lowest part of the Alps between Numus and the Schneeberg). In this and the following century, Pelagio-Ionic and Thracian peoples flocking from Greece and Pontus easily intermingled with the older possessors of the soil, the Pelagio-Umbrians and the Etruscans, and settled upon the parts nearest the sea. This last wave of emigration is referred to in the traditions of Medea and Jason, of Apollonius of Tyana, of the Argonauts and the Cuchans, collected by Pomponius Mela, Strabo, Pliny, Trogus Pompeius, and Justin. Hence the country assumed the name of Istria, and for ever lost its ancient name.

The existence of Thracians is also proved by the Periplus (Peregrina) of Scylaxus, of Chios, written by command of Darius Hydaspus.* [Some 300 B.C. we find that, according to Cleomirus of Sparta, who navigated the Adriatic, Istria ruled that water, and Florus informs us that “the city of Tarentum sent ships to trade with the shores of the Peninsula.”] The Istrian war (B.C. 177), circumstantially related by Livy (lib. xil. i passim), the destruction of Nessaenum, and the foundation of Aquileia by the Romans, brings the country into connection with authentic history.

This most interesting province, annexed by the barbarians, subject to a succession of conquerors, annexed by Venice, colonized by Slavs, and now part of the Austrian empire, has been copiously written about. The “Saggio di Bibliografia Istriana,” a stout 8vo of 484 pages, published by the learned Dr. Carlo de Combi, of Capodistria (“Tipografia Tondini, Capodistria,” 1864), contains the names of 3,000 works, divided into twelve classes, viz.: Geography and chorographical materials; natural science; ethnography; history, ecclesiastical annals, auxiliary historical studies (documenta à seriere), legislation and administration, political economy, beneficence and education, biography, various minor works, and classics. To these are added an Appendix and a scholarly Index. That much is not known about Istria in England we may judge from the fact that our guidebooks dismiss in four pages the whole subject; Pola included.

Already, during the last century, the illustrious Gian Rinaldo Carli, of Capodistria, in many cruder publications, especially in that entitled “Delle Antichità Italice,” had called attention to the great monuments and to the historic importance of his native land. In the third decade of the present century, the Istrian Canon, Pietro Stanovickich, of Barana, collected, in three volumes (“Biografia degli Uomini distinti dell’Istria”), notices of 478 fellow countrymen who had distinguished themselves in various civil and military careers. He was followed by Dr. (L.L.D.) Domenico de Rossetti (ob. 1842), who, writing with history and legislation, zealously defended the rights and privileges of his beloved Trieste, and who founded the Minerva (literary club); the Winckelmann monument; the Petrarchaeia and Piccolomini collections; the Archeografo Triestino; and other literary associations. He was fortunate enough to leave a pupil, the late Dr. (L.L.D.) Pietro Paolo Kandler, who surpassed all three in the extent and the success of his labours. Concerning this Istrian worthy, it will be necessary to say a few words.†

The late Pietro Kandler was descended from a Scotch family (Chandler), which had settled at Trieste, during the early seventeenth century. Born at Trieste, on May 23 (24?); 1804, he studied law at Padua and Vienna, and finally graduated at Pavia. Returning to Trieste in 1836, he became a pupil, a confidant, and a collaborator of Don De Vincenzi, and filled various important posts in the magistracy of his native city. He founded the museum; he forwarded the Imboscamento or enforcing of the Carso; and he became conservator of the antiquities of the Litoral (Istria, Trieste, and Gorizia); a councillor of government, and finally member of the Imperial

* Dr. de Combi’s father, Francesco, who died in 1872, was also a literary man. His translation of the Georgics in ottava rima has lately been published at Capodistria (1 vol. 8vo). The son is now professor in the Scuola superiore di Commercio di Venezia. His admirable catalogue is a great service rendered to students and editors of the ancient authors, and the book was published at the expense of a society of Venetian antiquaries.

† Murray is especially bad. He borrows almost textually from Topham’s “Austria,” London, 1840.

‡ I shall borrow from “Pietro Kandler,” a biography written by Sig. Tommaso Luciani, who first appeared in the Archivio Veneto, vol. iii., part 1. Venice, Triest del Commercio, 1842; and was subsequently reproduced in a brochure of 28 pages, large octavo.
But Dr. Kandler had confined himself to the study of Roman Istria; the science which arose with M. Boucher de Perthes reached him too late in life. His mind was large and receptive; he was willing to accept the theory of prehistoric man; he declared, however, that the business of his youth must be that of his old age. In his various excursions he had carefully mapped the network of the Castelieri ("La Rete dei Castelieri"), which covers the Peninsula, but he had determined the remains to be those of Roman camps. Some twenty-three years ago (1850–51), a Keltic origin was assigned to them by Carl Freiherr von Czoernig (S.K.K.Apost. Maj. Wirkl. Geheimer Rath, Präsident, etc., etc., etc.). This distinguished official, who has lately published a large volume upon Gorizia, could not believe that the warrior people had chosen the waterless summits of the hills for military positions, and, as in parts of the province the hill does not so much become a single spot, he justly assigned to them to a population, not to an army. But years followed before the final step was taken, when Sig. (lately made Cavaliero) Tomaso Luciani, and his kinsman, Dr. (L.D.D.) Antonio Scapuchiochis of Albona, by finding prehistoric instruments even in their native town, and by other satisfactory proofs, which will presently appear, set the question definitively at rest.

It would hardly be fair to speak of the Istrian Castelieri without a notice of Cav. Luciani's labours; as, however, that gentleman still lives, my account of his career must be suspended. His family, evidently and notably Italian, settled in the classical Republica Albonensium, the only classical Istrian Republic, as early as the fourteenth century, and acquired landed property. Born about 1820, he preferred, like the late Mr. Buckle, private study to the public school, and his early education was directed...
by the learned Albanian, Antonio Lorezini, who died in 1836. He travelled early through northern Italy, and worked at his own discretion in Padua and other centers of learning. In his spirit, patriotism, and indignation against the effect and harassing system of home government, before the reform of 1848 and 1867 made Austria one of the most constitutional and progressive of European countries, he was involved in political troubles, and in 1861 he left his country for Milan. He remained there with the transfer of the Italian capital (1865); and in 1866 the Scholastic became free, he settled there as an Italian citizen, and an employee of the Archivio de' Forni. Finding that the duties interfered with his studies, he resigned his appointment, and engaged in the pious task of copying and preparing for publication the documents of that valuable collection, which bear upon the history of his beloved province. In 1871 he attended the Congress of Bologna, and as the subjoined extracts show, he took a prominent part on that occasion. He periodically revisits his native city, and he uses his leisure to extend his investigations. Sig. Luciani has obliged me with the following list of his highly meritorious labors.

1847, Compendio di Antichità dell'Istria e della terra di Cervia, scritto indizioso al Dr. P. Kandleri, istriano, Anno II, No. 67, 68, pag. 216-277. No. 69, 70, pag. 283-329. No. 73, 74, pag. 308-309.

* Extract from the Congrès International d'Anthropologie e d'Archéologie préhistoriques. Compte rendu de la cinquième session a Bologne, 1871; with plans and figures interspersed in the texte. Bologne: Imprimeria Tava e Garagnani, au progre, 1873 (un vol. del pag. 547).

In the Rapport sur l'Exposition italiana d'Anthropologie e d'Archéologie préhistoriques, pp. 485-618, we read (pp. 490, 491): "Il sig. D. M. col Ella, disintissimo signor Ingegnere, ol'bo' per inquisizione combinazioni non ha potuto incontrare e conoscere in un mio recente passaggio per Trieste, mi hanno porto, per occasione di benevolenza, in un grave impiego di fronte a illustri genti del Civiltà. Mi riferisco alle lettere che si sono rese a riguardo mio nel 26 e 28 del detto giornale."

In the last report, dated Bolzano, October 1871, is signed, "Lei: Juris-G. Giussardi, G. Nicodemi, G. Ponzilli, G. Reggiani. L. Pizziotti, Rapporteur."
**ANTIPOLOGIA.**

"Il risveglio affatto accidentale di una importante lapide romana seguito o sono molti anni in Albona fra terra natale; il miraggio di una ricca storia antica.

L'autore ha dedicato tutti i suoi studi alla scoperta di queste lapidi, tra cui la più importante è la lapide di Albona, la quale è stata rinvenuta in un campo di frumento. La lapide, che contiene una data antica, è stata studiata attraverso tecniche archeologiche avanzate.

Inoltre, l'autore ha sottolineato l'importanza della conservazione dei monumenti antichi e della diffusione della conoscenza storica.

**THE CASTELLERI OF THE ISTRIAN PENINSULA.**

"Le castelliere dell'Adriatico possono essere considerate come un tesoro di bellezza architettonica e storica. Sono stati costruiti per difendersi dalle invasioni barbariche e proteggere le cabine dei pescatori.

Ogni castelliere è unico, con caratteristiche uniche che ne distinguono uno dall'altro. Le loro costruzioni sono state studiate attraverso tecniche archeologiche avanzate, per capire come fossero state costruite e per comprendere il loro significato storico.

Inoltre, l'autore ha sottolineato l'importanza della conservazione di questi monumenti e della loro comunicazione a un pubblico ampio.

**NOTA:**

- *This generalization is doubtful, as will presently be shown.*
- *A tracing accompanies these pages.*
THE CASTELLIORE OF THE ISTRIAN PENINSULA.

The example of these eminent men has done some little towards abating the exclusive rule of the Almighty Florin, the pure and simple worship of the Golden Cuff at Trieste. Amongst the little band led by them was the late Dr. Carlo Gregoratti, whose immature death at the age of 35 is still deplored. Born at Trieste in 1839, he took the degree of L.L.D. at Vienna and, returning home in 1869, he began practice in the town of Trieste. But he preferred the historic-archeologic department of study to all professional pursuits, and he devoted himself for life to illustrating the past of Trieste, Istria, and Friuli. His extensive reading, his perspicacity, and his fine critical spirit won for him the applause of experts, and he left behind him a manuscript of which, will, I hope, see the light in the pages of the Archivio Triestino.*

Another eminent scholar is Dr. (L.L.D.) Carlo Gregoratti, of Trieste, also an advocate; he is at present unfortunately incapacitated by illness from pursuing his interesting studies. This short compendium, you will perceive, buries over a subject which for adequate treatment would require more time and space than you can afford. Suffice it to show that Trieste has a right to be proud of its sons.

PART II.—VISIT TO THE CASTELLIORE.

And first of the name. The Italian population of the cities and towns apply indifferently to this class of ruins the terms Castellaro and Castellieren (old castle); the latter is a corruption of the corrupt and "dog-Latin" Castellarium. The Veneto-Italian dialect contracts the word to Casteller and Castelliere. The mixed Slav-speaking peoples of the hamlets and the country parts use some form of gred, a fenced town, e.g., gredino (old town), gredna, gordia (the ruins of an old town), or gordichin. As a rule, they are extremely ignorant of remains lying within a few paces of their doors, and the unwary inquirer will often be led for a quarter of an hour—that is to say, an hour and a quarter, if not more—through thorns and over natural tumbled of limestone, to see some crumbling Venetian Castle, which has always been destroyed by "Atilla savissimus."*


† In asking for picturesque weapons, the stranger must describe them to the Istrian Slavs as "Kanonica stevia" (a little stone of lightning or arrow-head); to the Italian as Fulmine, like the "Pedra do Coracao" of the Brazil; and even then they will not understand him. The Slav oxen have been used as torches, and many of the arrow-heads have disappeared after serving for many large light pipes.

‡ There is an important village of that name (Castelliere) a few miles to the north-west of Paruzzo, and a Monte Castelliere, to mention no other instances, is found north-east of Urago. Near the latter, I am told, lie the extensive ruins of the old Roman city "Spina."
Dr. Kandler having determined the Castellieri to be Roman camps, so disposed his "rota" that two points were always in sight for convenience of signalling, and provided many eminences with buildings, which, according to the best local observers, never existed. The experienced eye can always detect at a distance the traces of an earthen ring or ellipse formed by levelling the summit, and the gradual rise of the roads, or rather ramps, which are as a rule comparatively free from trees and thickets. A nearer inspection shows a scatter of pottery, whose rude and sandy paste contrasts sharply with the finished produce of the Roman kilns, and the more homogeneous materials of modern times. It would be easy to collect a ton weight of these fragments: I forward a few for the satisfaction of the brother of Dr. Kandler. The tracing is defined by an unmistakable sign, the black earth, which stands out so clearly from the surface of "Red Istria."

The effect of ashes and offal, of debris and ruins, our terreno nero seems, in irregular and detached spots to prevent any growth but coarse grass and dwarf thorny shrubs. In a previous publication ("Unex. Red, Syr.," I, 50), I have dwelt upon the facility which this "black malm," this rotten dark soil, affords in demarking the outlines of ruined cities, which, like Balbek and Palmyra, Tyre and Sidon, once occupied ten times the extent of their modern successors. Lastly, the existence of the Castellieri as pre-historic, not Roman, ruins is established by the discovery of stone weapons.

The rugged ridges of the peninsula, the more enduring lime-stone walls of the Castellieri generally define the enceinte. But in the interior, where the defences were made of the easily degrading sandstone, the chief guides are the earthen earth, the pottery, the black earth, and the stone implements. Let us hope that increased activity may presently bring to light crania and bones which shall enable us to determine the race that occupied these interesting remains.

As a rule, the Castellieri crowned the summits of the detached conical hills and mounds, which, though moraine does not exist, appear to have been raised and turned by glacial action. Another favourite site was the Col or Pass; a third was the buttress or loop-shaped projection of the escarpment (the Isola small, the Scotch Malt), which forms the break and the ravines of the barthet or folke. Hence the peculiar appearance of many Istrian towns, such as Pula and Galgianum, which have been built upon these prehistoric sites. Viewed from below, they appear to be perched upon the summits of inaccessible rock walls. A crow's nest, with a stick driven through it, is the only object they suggest from afar, and they wear a peculiarly gloomy look, like the phantoms of settlements, when seen through the mists of a dark evening. Nor can they be called villages: they are towns in miniature, little castles, and, in fact, not unlike the "Hof" which represented Vienna before 1556.

The cold heights preferred by some villages—for instance, that on the Monte Zucchero (or Sisid I), a southern prolongation of Monte Maggiore,—would show that the people had modes of defence against inclement weather. All, however, are not on high ground; the remains of a Castelliere are shown upon the low levels between the hamlet of Cheriano (Cassianium l) and Lake Cepich (Leucis Arlia), Istria's only lake. Nor are they confined to the continent; e.g., two are found, according to Dr. Kandler, upon the granite of the Smin Islands, and two in Sant'Andrea and San Giovanni on the sea south of Rovigno.

The enceinte was double, except where the approach, inaccessible to the spade, rendered one rampart sufficient, and the shapes were very irregular, being determined by the accidents of nature, usually the front rested upon a cliff or rapid slope, and the typical formation of the whole is shown in plates 8, 9, 10.

The whole peninsula was at one time scattered over with these villages, and Fate has treated them with her usual caprice. Some have been carried off bodily, especially those lying near the lines of

* Some travellers have rashly denied the existence of "subterranean rivers." These speeches seem to ignore the fact that they are common to every limestone region. They are noticed by Li. Gambier in South-east Tibet ("Ocean Highways," March, 1874). Amongst the "Wonders of the Trastewere"
Carrara, seats the famous Bucephala, which, in its subterranean course, reappears at times, showing itself through three distinct air-holes, and after an underground flow of 50 direct geographical miles, re-emerges to form the classic Timavo. It is described by Stelvio, Pliny, and all the older geographers. The word soland, peculiar to this part of the country, is supposed by M.M. Kandler, Tamaro, and Tomassini to be derived from the Latin solis, and the Greek polus, a den or nest; the modern Indian equivalent is jaba, a burrow, burrow, or grave. I doubt the derivation; "fovea" does not explain the feature, which Chevallier calls areae solanum, and Tomassini (p. 179), "bucehe apertura della terra." The Slav term is jena, applied at the grate or Teut of Savyneto. If fovea were the origin of the word, we should expect to meet with "foib," amongst the Apenines. Possibly, like "foh," it may be a remnant of the old Kelto-Thracian foneg spoken by the Carpathian race.

Dr. B. Davis supplies us with a Cornish "fow," the Welsh "fan," and the Irish and Gaelic "canalt," a den, cave, or lurking-place of wild beasts. These are evidently Keltico-congeneric fóis and foias. In this fovea and jena, we have analogous names, both exhibited by "fow," which Murray ("Hand-book of Southern Germany," See. All., p. 70) connects to the Teutonic "fow," and of Pindia, Turnbull ("Austria," i, 13) mentions the grotto or cavern, but seems not to have asked for the name. The modern German term is not fela, but jahne, and the features about the Cobs Lake and Capelathan Argostoll exactly correspond with those of Istria.

THE CASTELLIERI OF THE ISTRIAN PENINSULA. 391
modern roads. Others are in process of disappearance, being found useful for villages, and on the heights for the rude huts of the shepherd and the goulard. But where situation, which determines the Eternal Cities of the World,—Damasus, for instance,—was favourable, the Castelliere, as at Piseo, became successively a castle, a hamlet, and a town, with the fairest prospect of being promoted to the honours of cityhood. On the other hand, Mugna Vecchia, in the Back Bay of Trieste, has in turn been a castle and a church-town, and now it is a ruin, whilst its neighbour, the Castelliere degli Eleri is utterly broken, and Antignano is still a village. The town, as a rule, seems to have been a very natural sequence, and there we can account for the fondness for high places from which the idea seems to have possessed the ecclesiastical mind.

The following list of fifteen Castelliere in the territory of the Albania, which occupies the south-eastern part of the Peninsula, shows the total to be considerable. It was given to me by Dr. (LL.D.) Antonio Scamperchio, who warns me that the principal sites which hold out hopes of prehistoric remains may be reduced to five or six.

1. Codisacco (i.e., Costa de Lago, viz., Capech and the Roman Capriniun) al Castello, usually known as the Castelliere di Monte Zuccheria. The latter must not be confounded with the height of the same name near Pola.

2. Gradina di Costiaco, on the way which leads from Villa Voschi towards Fiumana: this does not include the Castelliere between Chersano and the lake.

3. Sambori (in the Austrian military map, which abounds in name-errors, Samburg) upon the eastern escarpment of the upper Carso or Val d’Arco (the Latin Arsis), to the left (west) of the road leading from the Albanina to Pedena. On the other side of the great ravine is the Castelliere of Oritx, a village about an hour’s walk south-south-east of Pedena.

4. Gradina, near Sambori.

5. Starigrad dai Ruschi, lower down on the eastern escarpment of the Val d’Arco, in the territory of Vettura d’Albona; here was found an axe of fine black stone.

* A wise provincial law, "De capris non tenendis," found in the Trieste Statutes of A.D. 1350–1420, and renewed in 1844, forbids goats to be fed throughout Istria, except "alma corda," that is, they may not wander about in flocks to the utter destruction of shrub and young tree. The present complaint of the feasting legislators, because the flocks are at 50 instead of the 30 given. The only places where I found exceptions were on the suburban terraces between Pola and Parenzo, and even there all sensible natives spoke of it as "una barbaris." The example of Istria and Iceland, which exterminated goats for injuring the herbage, should be followed by Syria and Palestine: the despoiling of the Holy Land is merely the work of the Capra domesticus.

† All are agreed that there was a Castelliere at Pissano-Vesuvio, on the hill west of Piseo, and my friend Sig. Antonio Coras contends that Piseo itself occupies the site of a prehistoric village. The latter place, with its grand "Foiba," and its noble castle of the Counts of Montecucco, are the remains of the ravine and the Rashah of Algerian Constantinian. It is a most picturesque place, well worth a visit.

6. Punta di Santa Croce, near Zamparavizza (map, Tasparoviza), at San Martino, also in Vettura d’Albona, and east of the Val d’Arco, the gorge that divided Italy from Liburnia.

7. Gradina, near the mouth of the Canal dell’Arsia, over the Valle di Feo, near Point Ubal or Ubaz, the eastern jaw of the Fjord, in the Commune of Cerovizza d’Albona.

8. Gradina, in the wood of Punta-Alba, opposite Castelvecchio, which lies west of the Arsa Fjord. It is also in the Commune of Cerovizza d’Albona.

9. Gradina, near S. Gallo d’Albona, about a mile and a half south-east of the latter site for the fondness for high places which seems here to have possessed the ecclesiastical mind.

10. Cunzi, which, being the best preserved of all the Istrian ruins, shall presently be described in detail.

11. Punta di Portonovo, an inlet and port south-south-east of Albona. Here, they say, are found Roman remains in the shape of built tanks and a strong wall.

12–13, 14, 15. Four ruins of Castelliere, on the heights between Fiumana (the old Roman port and castle of Flaminia, which gave a name to the Sinus Flaminius, near Quarano) and Zagoria (i.e., behind the Gorn or mountain).

This list does not include Albona itself, where several prehistoric implements were found, nor the Gradina of Moschienoz in the Comune of Volosca, north of Albona. The latter can hardily be visited without the guidance of Sig. Tommasich, the civil and obliging innkeeper of Moschienoz, the village which fronts the beautiful Quarano gulf.

And now bidding adieu to generalities, I will describe my late excursions in company of an old friend, Charles II. Williams, late of Bahia, to the half-dozen prehistoric buildings on the east and west of the Istrian Peninsula.

My second visit to Albona was so far unfortunate that Dr. Scamperchio was absent, being one of the deputies of the Istrian Diet at Pareno. His brother, however, kindly sent with us an "indicatore," Marcos Juricich, who had some personal knowledge of the places about the Commune. After a glorious November morning, which whitened the valleys with hoar-frost, and which showed sea and sky blue and clear as in the arid regions about the Red Sea, we descended the zigzag road of Albona, and struck north-north-eastwards to the Cunzi hillock. It is a dwarf lumpy chine, about a mile long, disposed north-north-east to south-south-west, with lower lands on all sides. At this season the oaks, the scrub, and the blackberry bushes which here inhibit the neighbourhood of walls and rocks, are of a dull bistre hue, contrasting with the verdure of the Dolomitic valleys, the lighter brown of the hill curtain over Flaminia, and the French grey heights

* Sig. Antonio Coras believes the old I-strian city of Neustium, to be celebrated in the Roman wars (n. 17), to be south-east of Albona. He places it not in that part of the Arsa, but at some distance to the south, on the Valle d’Alba, south-east of Montecucco, at a site called Gradina, which is described as the "King of the Castelliere." The peasants still call the place Va (in Sutro) I shall visit this part of the country as soon as possible.
of the local Chimborzao, Monte Maggiore, whose crater-like summit, assuming, from certain rhumbs, the figure of "Arthur's Seat," forms the background. The Cunzi hillside is crowned northwards by Krimi-brack (Cross-hill), a tree-grown conelet, which acts mile-post to the ruins. A Roman road defines the inland face; the outline is also traced out by an unfinished macadam.

The hill flank facing Albena is covered with heaps of stone, connected and detached: the latter suggest that the vineyard-huts, especially remarked about Pola, may be the relics of older forms. They are oven-shaped; the walls are of dry calcareous fragments, and flagstones, overhanging and unsupported by posts, compose the roofs—about Huns and Hannib, I last saw similar dwellings. Two grassy slopes, in places bearing signs of pavement, gently ascend the south-western flank, but the whole approach wants surveying. As the thickets are cut down every six or seven years, it will offer an excellent opportunity for a detailed plan.

After crossing sundry dry-stone walls dividing the property of the Baron Lazzarini from the upper part, which belongs to the Depangher family, we came in sight of the ruins, and my visions of Nuragic and Talarics were rudely dispersed.

The Castellaccio di Cunzi,* stands upon the brow of a slope rather than a cliff; and its frontage-wall has disappeared. The distance is about three-quarters of a linear geographical mile from the whitewashed and conspicuous steeple of Albena, which bears from it 250° mag. Its builders certainly had an eye for beauty like Carthusians. In front lies the shallow and fertile valley of Ripenda, which is also the name of the Comunun or Gemeinde, bounded by a tongue of land, at whose tip appears a stripe of ultramarine sea carrying many a boat. About 1,200 feet below; and to the right, or south-east, lies the snug cove of Ribat (Ribax), the "marina" of the little old republican castle, whose ivy-clad castle walls may be seen through the thin wood. Beyond the Parassino or western canal of the great Quarraro* gulf lies tall Cherso (Cirena ?), the Capri of the glorious bay of Thune, and a white patch denotes its capital (142° magnetic). To the south-south-east (175° N.), rises Monte Ossoro, a regularly-formed pyramid, at the extremity of Luscin island; and the eastern background, high towering in

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* Baron Carl von Coerovic (junior) protests against my writing Cunzi as a Slav word for Kunzi (a corner); the former would be pronounced Zunzi, and he declares the German has no right to turn "Bohoren," a g. into "Boiron." I have preferred Cunzi because it is the Italian term, at the same time confessing that Kunzi would be more correct. The guide, a Slav of Istrian family, pronounced the word Guinea, with the Arabic Ghayn (g). In Dr. Kandler's map it appears, if it appears at all, as S. Antonio.

† The arsenal (compensated) showed 28°7, and the therm. 55°. But the Boiron, or little lake, was blowing, and the barometer at sea level might average 30°60. On a subsequent visit it stood at 30°76. "Ripenda" appears to be the name of the whole sea face as far as Fiasson.

‡ The classical Sinus Platinus, Dante (Inf. ix. 312) writes, "e in un poeta, vicino al Quarraro," which is not for the purpose of rhyming with "vaco." My friend Lacinia assures me that the form is common in old documents, though now obsolete.
the castellieri of the istrian peninsula.

jagged summits against the cloudless sky, is the grand curtain of the
Dalmatian mountains, the jagged Dinaric Alps; whilst the quaint
nudal crest of Monte Maggore forms the northern horizon.

The brow of the fronting slope bends gently from north-east
and south-west to south-west-and-by-west, and the whole length
of the frontage in round numbers is 320 feet. At the edge
begin the double walls, which gradually diverge till, at the
north-western part of the oval furthest removed from the
cliff, they leave an interval of 50 feet. Commencing at the
north-eastern end, the inner enceinte, after 95 feet, shows
a regular entrance, which is best explained by the accompanying
sketch (No. 1), taken upon the spot. Some are of opinion
that this most important feature is modern, but I failed to
detect any trace of restoration, except about the crest, and in the
proper right staple; the latter had been piled up with small stones to
a height of 13 feet, when six or seven would amply suffice.* Thirty
feet more led to a gap (No. 1), not a gate, and beyond it 145 feet showed
us a second gap (No. 2 in the plan) opening to the north-north-
west, which may or may not have belonged to the original. The
southern are measured 330 feet, and the total circumference was 565,
whilst the diameter of the inner enceinte, from east to west, amounted
to 230 feet.* The terre pleine showed a thick growth of young oaks
and scrub, with natural slabs of limestone; neither here nor elsewhere
did we see any loose heaps of smaller stones suggesting that the
habitations were anything but the spoils of the neighbouring woods.

There was a clear grassy space round the greater part of the inner
walls answering to a rampart in modern fortification.

When laying out the village, the crest of the cone or buttress was
evidently cut away in one or more places, leaving part of the original
earth-layer to form the parapet-base. Upon this foundation were
planted large blocks of limestone, sometimes measuring two cubic
yards, in tolerably regular order, "nunos secos," invariably without
mortar (malta), and never of cut nor worked blocks; the last
ensemble formed a rough architecture of the style commonly called
Cyclopean. The inner thickness of the parapet was apparently
filled with smaller stones, and the thickness varied from 18 to 31 ft.

near the north-north-western gap. The inner scarp was steep and
clean of rubbish; the outer or counter scarp, disposed at the natural
angle, was covered, for about 30 feet (sketch No. 2), with masonry
stones, which have slipped, or been thrown from their position, and
the Castelliere, like the other ruins, was closely invested by a thick
growth of scrub and thorns. The enceinte between the outer and
inner walls was mostly grass-grown, and here I should suggest were
kept the cattle and goats belonging to the villagers. In the space

* By the kindness of Dr. Scaupicchio, I hope presently to supply a photo-
graph of this feature, so important in determining sundry details of restoration.

The external wall of the ellipse is said to be 440 paces (=1,165 feet) in
circumference; but I did not measure it.
between the two, old Maresco showed us a circular digging which a "Prussian" had attempted; he assured us that it yielded scant results. The black earth and broken pottery here as usual dotted the wall, and at the Museo Scampicchio I was shown twenty-three fragments, whose inner paste suggested Roman origin. Two earthen vessels were found; the double-handled specimen may be of Latin make; the badly-baked single-handled pot is probably of earlier date.†

I cannot end this sketch of the Castelli di Cunzi without an expression of gratitude to the Depaccher family, whose enlightened care of the rain has preserved it from the plundering which has afflicted its neighbours with the "abomination of desolation."

The next Castellara which we visited was on the right of the highway from Vraga the Raven,§ across the Col of Monte Maggiore, leading to Flumine. A great gash in the western flank of the mountain bears upon its right lip the little settlement of Sarn-Vraga (Vraga Vecchia), the Roman Aurania, and near it a "Mull," a loop-shaped buttress, with a narrow neck, was pointed out to us. The ruins of a castle, probably Venetian, here concealed all traces of the Castelliars—"if ever there was one. But higher up, near a farm-house known as "Nezol" (Nezul) a Priory, we saw the arc of an enceinte whose slope nearly reached the right of the road: it offered nothing new.

Our third excursion in the neighbourhood of Albona was to Dubrova, a large country house belonging to a family of wealthy landed proprietors, the Baronu Lazzarini. Our guide on that occasion was Sig. Ernesto Nacinovich, who hospitably invited us to take up our quarters for the night at his father's house in Santa Domenica. A walk of about twenty minutes to the north-north-east, up a rise garnished with the usual scrub and thorns, placed us at the large settlement whose northern part is called Sternitz, and the southern Sarn-grant. This Castellara faces the shallow Prodol valley; it has been almost destroyed, and its only point of interest is the adaptation of the irregular enceinte to the exigencies of the ground.¶

* I was wrongly told that this digging had been made by the great classical scholar and historian, M. Mommsen.
† Some of these are remarkably heavy and thick, reminding me of the specimens which I brought home in 1871 from various parts of Syria and Palestine.
§ I have secured a photograph of this interesting specimen.
¶ The Slav word is Bran, a linguistic analogy with the Scandinavian Brod, the Teutonic rad, and the English rock. Here the radical consonants are r k (or its cognates r and k), and, curious to say, we find them in the Hebrew coor and the Arabic ghur (a ravine), which notably gave rise to carens, corn, crown.
¶ The inn-keeper at Vraga calls it "Biso Vareigka va Rubekka pot (under), Stagie (or Stago) in allo Sarn Vraga sotto Monte Maggiore." If the traveller does not ask precisely, and with the words used by the natives, he will fail to find his place.
*

Sig. Nacinovich also showed me a Dolina (i.e., dol, that, only, and rake), a corner-shaped hole in the limestone field to the north of Santa Domenica, popularly known as Venezia. It contains two caves, one with a single, the other with a double entrance, respectively opening to the south and north. I reserve, however,
THE CASTELLERI OF THE ISTRIAN PENINSULA.

Before leaving Albona we inspected the Museo Scampicchio, and found some interesting specimens of stone weapons. All were of the polished category popularly called neolithic, and indeed throughout Istria, which is utterly deficient in flint, I have seen nothing of the ruder, if not older, type. With the kind permission of the owner, tracings were made, and the following is a list of the most important articles. None of them presented any novelty of shape, and, as usual, they were mostly composed of stone which is not produced in the country. These tools and weapons seem to have travelled as far as coveries.

1. The two arrow-heads of silex, one with, and the other without, a tang (see Plate 9); were found in a kitchen midden at Verno, near Pisino, and Sig. Antonio Covari lately showed me a third from the same place. Verno has supplied land and sea shells evidently used for food; and the split bones of mammals, bound in a calcareous matrix, and forming an ossiferous brocchia.*

2. The tracing in plate 9, of course "life-size," is that of the magnificent greenstone axe, the largest specimen of its order exhibited at the Anthropologico-Archaeological congress of Bologna. It has been for half a century in the Luciani-Scampicchio family, which it has happily and effectually protected from the "thunderbolt."

3. Albona itself has supplied five specimens, a pestle or rubbing stone of pyramidal shape; a black axe, which might serve as a toeholme; a small and very graceful axe of greenstone; a third of similar material with a sharp edge and the fragment of a fourth axe.

4. From Pedona, evidently a prehistoric site, which has just built at the expense of 12,000 florins a campanile (bellry), at least large enough to lodge the whole village, were brought a fine axe of greenstone and a polished edgeless cube, concerning whose use I am doubtful.

5. An axe from Parenzo.

6. A polished fragment from Finouma.

7. An axe from Chiuse Island.

* An account of this formation for another paper upon the cave dwellings of Istria. Car. Luciani writes to me as follows:—

"Ma raccontò di intraprendere una studio seria, in la prego di non limitarsì ai Castelleri, beni di estendersi anche alle caverna. Molte le diramazioni che sono inaccessibili, impenetrabili, che furono visitate da altri, che in esse non hanno indizi di abitazioni e di resti umani. Non si acquisti a tali assicurazioni. Il paese non è in tenero abitazione, in questo campo di scienze nuove, e per conseguenza i più sono increduli, hanno difficoltà e creano impossibilità che non esistono in fatto. Veda con propri occhi e tocchi colle proprie mano. In Istria comincia essa nella lettera al Dr. Busacchi; distinguendo le vasellami (volgariamente fado) dalle caverna (grave). La prime per loro natura, precipitose e perpendicolari, inabitabili veramente, lasciando parte al geologo; ma le seconde che si aprono sui fianchi dello costiere o si svolgono orizzontalmente, o quasi, nelle montagne, tocca a noi esplorare attentissimamente, perché sotto la corte stalagmitica contengono, a certo possono contenersi, l'incognita dei primiti habitatumin selvaggi."

* I reserve the subject of numerous brocchie in Istria and the Dalmatian Islands for a future paper.
8. A polished stone from Chersano, apparently an axe, but partly of adze shape.

After bidding adieu to our kind hosts we drove over to Pola, which my companion wished to visit, and passed a pleasant day mostly at the I. R. Naval Club, in company with our comrade Commander J. William Grycehos, and his brother officer, Captain Edward Gerninnig, both of the I. R. Austrian Navy. Hence we travelled by unpleasantly devious roads up the western coast of the "Eastern Piedmont," greatly enjoying the change of climate. We had endured two days of winter, ending in torrents of rain with thunder and vivid lightning, and one of melancholy grey sky and furious north-wester, which, cooled by the snows of the Monte Maggiore and the "Tschisitschen Boden," might have been claimed by the coast of Essex. But on the western shore there is a delicious atmosphere, cold, clear, and calm, reminding me of Upper Sain in the north-east monsoon season. "Blustering Boreas," which on December 7th, 1873, upset a coach, and overturned a train of five carriages near Fiume, killing three and wounding eight passengers, here ceased his bullying, and the only symptom of his course across the bleak and barren highlands of Styria was a pallid blue sky, with the driest and the most bracing air. The aspect of the Adriatic, and the forms of the shelving rocky shores, suggested to both of us reminiscences of Malta at its very best.

At Rovigno, the largest city of Istria, far-famed for a modern (A.D. 1725) and somewhat barbarous Basilica of SS. George and Euphemia, a find had lately been made in a cave which supplied Roman remains; they had been sent to Cav. Luciani, who occupies in these regions the position won for himself by my friend, Mr. George Petrie, of Kirkwall (Orkney). Thence a dreadfully devious road, caused by the Canale de Lume (Oltre le Linee), which still awaits a carriage ferry, led us to Parenzo, the actual seat of the Istran Diet. My object in visiting this town was to obtain permission to copy the Relic de Castellone left in manuscript by the late Dr Kandler. I hasten to say that my application was at once successful. The Provincial Captain of Istria, Sig. Francesco Vedulich; the Vice-Captain, Dr. Andrea Anororo; and the Secretary of the Diet, Sig. Carlo di Francovich, an archeologist who is carrying on Dr. Kandler's work, immediately supplied me with a card to Madame Giovanna Kandler-Banchi, the only child of the venerable antiquary. On the

- There are four undated revolvers, pistols, and carbines, in the I. R. naval arsenal, concerning which Captain Gerninnig, the Director, has kindly promised me to make inquiries.

Dr. Turner, in a recent address against his "Murphy" ("Handbook Southern Germany"), who tells him (page 450) that Porei, seven miles from Pola, is a small village inhabited by a Greek colony, still retaining the language and picturesque costume of their country. On a blazing August morning Mr. de Poreche and I walked some five miles to see these "Greeks." We found a few households of Albanians and Montenegrins, who colonized the place in 1657, and who are "Greeks" only in religion. The "wretched inn" of Dignano, mentioned by Turner, also has greatly improved under the frequent visits of naval officers from Pola: the Albergo Ferraro is now one of the best in Istria.
day after our return to Trieste, the maps were placed at my disposal. Their great size, a photograph of the Cadastre map, and complexity of detail, render an exact copy far too cumbersome and detailed for popular use. I, therefore, requested Dr. Angelo Quarantotto, C.E., to insert what is requisite in the printed map of Istria forwarded to you with this paper.

Parenzo, however, deserves to be visited for its own sake. It is distinctly the most Roman city in the Peninsula. The Cloaca Maxima, some five feet high, runs under the principal street, which is regular, and lies parallel with the Marina; the temples of Mars and Diana still exist; and two squares preserve the name of Praetorium, somewhat corrupted, and Marforio or Forum Martis. All around it linger traces of Roman occupation; the reefs of limestone are pitted with Sarcofagi, sundry of which face east-west and with those square shallow basins (Vaschi), which Syrin still determines to be ancient oil presses, wine presses, and vats for preparing lixivia. It is not a little startling to be shown the farm of Claudius Pansa, as if that ancient worthy had just departed this mortal life.

At Parenzo I was fortunate enough to find Dr. Antonio Scampicchio and Sig. Antonio Covaz. The former introduced me to his kinsman, the Marchese Gianpaolo de'Polesini. Excursions were hastily planned, and on the afternoon of the same day we set out to visit Montecello (i.e., Monte Castello), in the Cervara property, belonging to the Marchese. Driving along the shore, we reached the place in a sharp half-hour, and a walk of a few minutes over low ground and up a dwarf rise took us to the Castelliere. The accompanying plan, which I owe to the owner's courtesy, will obviate the unpleasant necessity of description. Here the chief novelty is that the Romans evidently occupied part of the prehistoric site, whilst the nucleus is clearly shown by its warty hill.

Next morning we resolved to walk to Santangelo, which lies some forty-five minutes south-east of Parenzo, on a rise somewhat off the Roman road. It is rendered conspicuous by the ruins of a comparatively modern church, dedicated to the Invocation which gives it a name. This Castelliere has the normal indications—grassy ramps, an earthen crest, black earth, and an abundance of broken pottery; but there are certain novelties of detail. The flat, rocky plateau, with precipitous sides, where the church stands, was apparently an acropolis or capitol, which required no artificial defence, and the only sign of enceinte is on the lower slope which ends the smooth terrace plane. To the north was a remnant of an entrance, four slabs placed as steps, which might, however, have been made for the convenience of pilgrims, but the traces of a gateway below

* The exact position is the modern Cervara (Lat., Cervaria). Dr. Kandler places "Figilae ampullaeus patronum Cervaria" on the shore north of the Castellare and great quantities of broken pottery, useful when compared with the prehistoric remains, are still found. Indeed, the whole of Western Istria abounds in " Figilae."

† Istria still preserves the word *latian*, which, in the Spanish form *catrania*, means the breeding estates of the Argentine and Uruguay Republics.
the eastern crest suggested a much older origin. A sarcophagus (lidless) was found cut in the rock rim of the apocropolis; it frontal east-south-east to west-north-west; the length was 1.50m.; the greater breadth 0.60m., and the lesser 0.51m.

This portion of the Istrian seaboard is a smooth and gentle slope, everywhere studded with natural tumuli of red earth, covering cretaceous limestones, and again showing possible glacial action. The land is said to be gradually subsiding, but I have as yet failed to find proof of this.

The nearest want to the north bears the name of Mordille, and here modern quarrying has obliterated many traces of the old Castellers; at a distance the knobbed cone looks like a large modern fort. To the southeast also rise the Pizzaghi tumulus, whose notched outline and ascending terraces at once reveal its quality to the experienced eye. Dr. Kandel located other "Roman camps" at Monghebbio and at San Servolo, the latter a fourth tumulus; but the Marchese, who is familiar with the spot, absolutely denies that any signs or traces of habitation are to be found there; the same was said of Punta Grossa, the 4th point south-south-west of Parenzo along shore, and of the adjoining southern point where "Castelleria" are also marked.

We returned to Trieste delighted with our tour; I fairly recommend our example to those of my countrymen who are willing to undergo a medium of discomfort, especially the utter want of fireplaces and fires in winter. The climate, which I have now tried in August and December, is healthy, except in rare parts, and everywhere essentially temperate, as the Persians poet sings:

"Na garmi sh gum o na sarat sh sad.

The heat is not hot, nor its cold is cold."

—and, as the Anonymous (Scurmus) describes it (382),

"ως γερά γιακεία όλος ο ξέφυγος φιτυτεύον.

Non nivemus esse nique nimis frigus.

The roads are as a rule excellent, and horses and mules are everywhere procurable for the byo-ways. In the chief towns, whose actual aspect is that of the old Venetian cities, the interiors often preserving the wild romantic cast which distinguishes the pyramid-shaped fastnesses of the higher Apennines, ins of some kind are invariably to be found. In the country quarters there may be difficulties about bed and board, and "women" is often the answer to "ostra e' da mangiare?" The early ladyship at Chersano informed M. de Ferrochel and myself that the house was occupied by herself, her husband, her mother-in-law, her children, and a widow lady who happened to be staying there, but that, as the weather was fine, we could sleep under a tree. On the other hand, the good host and hostess of the Cannanorri inn insisted, despite all my objections, in vacating the marital

* At Ravigna there is a tradition that the island upon which stood the ancient city Arpinum, has sunk bodily. Sig. Locari (p. 40, "L'Istria, Schizzo-Storico-Etnografico") places the event about A.D. 710.

THE CASTELLERI OF THE ISTRIAN PENINSULA.

four-poster. The peasants were everywhere as remarkable for their civility to strangers, as for their temperance and orderly conduct; they show a variety of interesting types, and they preserve their picturesque costumes, which everywhere vary. The townsfolk are not so courteous; the out-of-the-way places contain not a few "radii" as the Brazilians call them—mean whites, who mistake impudence for dignity—and throughout the country there is a truly lamentable backwardness. The unfortunate women of Albano, like their prehistoric sisters, must fetch and carry on their backs huge pans of water, because cisterns are wanting, and the city is not supplied with the simplest mechanical means for raising the necessary of life. I would specify Pingente and Fianona, where the bargers will laugh in the foreigner's face, carefully warning the reader that nothing can be more courteous than the gentry. My lamented predecessor (Charles Lever), wrote upon this point:—"There is probably no prejudice so strong, so rooted, and so indecipherable in the hearts of the masses, as the dislike of the stranger as stranger, and the desire to make him feel as painfully as possible that, in every point on which he differs from the natives in dress, manner, or demeanour, he is so far deviating from the standard of all that is decent, proper, and becoming. The amount of this feeling in a people is the best measure of their advancement in civilization." I should not have noticed this point had not the condition of that ancient bourgeoisie contrasted so painfully with the civility of their own order throughout Italy, and with the buonanisi of the Slav peasantry.

This backwardness, this sluggishness in progress is not confined to Istria. It extends all along both shores of the Adriatic. Allow me briefly to tell the tale of the two cities, and to contrast their conditions in the closest way. (San Salvador da) Balia, one of the many ports upon the Brazilian sea-shore, was hardly inhabited three centuries and a half ago. Besides her railroads and her lines of steamers, she has two street tramways, and she is proposing a third. She has a lift connecting Basaville and Hautville. She is building immense docks to increase the convenience of her noble bay-harbour, and she has spent large sums in bringing water to her doors, and building fountains, which are mostly works of art. Trieste dates as a city from the days of the Romans, and she is the chief port and the great centre of commerce, the "Emporio Mondiale," in the wealthy and powerful empire of Austria. She has not a yard of street railway. A lift to the Carso has been proposed for years without being begun. It is easy to walk to Opatina in an hour, about the same time that the fastest mail train takes to reach it. A tolerable natural roadstead bids fair to be silted up because the lighthouse island (Batteria Luch-Thurn) has been connected with the main land by a dam instead of arches; and a huge system of stone moles has blocked the bottom of the bay, with a wilful waste of some sixteen millions of florins—a sum that must be doubled before the new port can be used. The Opera House is old and unclean, it only for a pauper country town, and the rich city
rests content with the model of a new theatre. The water supply, despite a dozen projects proposed since 1835, is a disgrace to a civilized community. And why? Because a sterile politics occupies the immense amount of talent and energy which should be devoted to progress; because inveterate party feeling, which shows itself by throwing spits and petards amongst women and children, stands in the way of all improvement. Upon every conceivable proposal there are, and there must be, the well-packed bundles of opposite opinions, and the unfortunate city, like the animal in the apologue, knows not which way to turn. Yet Trieste is a century in advance of Padua or Verona.

It is not difficult, with the aid of old experience and a little imagination, to restore the ancient savage condition of the settlement; and the traveller, especially the African traveller, has the advantage of having lived in prehistoric times. Tacitus says of the Germans, "Urbes habitation satis notum est..." vicis locant, non in nostrum morum, annexis et calamantibus edificiis; suam quisque domum spatio circumsit;" but here we can allow only passages between the houses. Reasons have been given for believing that the village was of wood and of thatch, rather than of stone: "inbrem calum aut fronde: definitum" (Seneca de Prov.) and "case more Gallico stramentis textae." We must prefer the conical or beehive-shaped huts of the lower races to the squares and parallelograms which mark a step in civilization. The walls of the enceinte or enceintes will be six or seven feet high from without, and three or four within, allowing the war-men to use their arrows, javelins, and sling stones; while a clear space, where the youths keep guard with axe and spear and club, separates the huts from the bulwark. The gateway or gateways will be closed by fascines of thorns, especially the Spina Morocco (Paliurus aeviculare), the Unum Ghaylan (Mugheilan) of the Arabs, whose crooked armature renders it a true "wail-a-bit," laced by tree-trunks forming stout palisades. Tombs in it allows trenches and wooden stockades, but the latter are not necessary. The habitable area inside measures 24,000 (=200 by 120) square feet, and allowing 200 to each hut, the village will contain a total of 120 hearths. Reducing this number to 100, that there may be room for yards and passages, which take the place of streets; and giving a minimum of five to each household, we have for our village a posse of some 150 fighting men, between the ages of 18 and 55. As the territory of Albuqna contains some twenty Castellari, the population of Eastern Istria would not number less than 10,000 souls, if such term can be applied to men who had only ghosts—spirits, not spirits. This means that the inhabitants, though an alpine and fierce race, supported themselves by some form of agriculture; that deer, bears, and wolves were not rare in the mountains, and that hares, foxes, badgers, and martens (Mustela foinea) were common on the plains, as they still continue to be. There is no sign of a temple, the old Istrians, according to Lucian, worshipping trees, trunks and rocks—rank Fetishism. Possibly, like the Germans of Tacitus, they adored earth, or, like those of Caesar, they venerated
the sun, the moon, and fire ("Vulcan, Agni deva," &c.). They would have a determined creed as they advanced in civilization. At last, according to Justin, (ix. 7) the Istrianiorum Rex fought the Scythians, and compelled the latter to beg aid from Philip of Macedon. Moreover, Martianus Capella speaks of the "Thorax, Histri dict," and we know from Herodotus (v. 1) that the Thracians, after the Indians, were the greatest of barbarous nations. They penned their live stock between the outer and inner walls, whose entrance or entrances they blockaded up with equal care. A total want of water-supply shows that the days of sieges had not dawned, and that the simple act of taking refuge within the enclosure determined the retreat of the attacking party.

I will now invite you to enter with me the prehistoric hut. It is wigwam or sugar-loaf-shaped, the roof-tree being an oak felled by fire and by the slow and painful labour of the stone-axe. The doorway, without door, is between three and three and a half feet high, to ensure alternate warmth and coolness and to defend from flies; it also acts chimney for the smoky fire, which in wet weather is built anywhere upon the floor. The central blaze serves to clothe the inner thatch with a fine yellow hue, and with long stalactites of soot, depending by way of ornament. Another use is to purify the ground, which, without an occasional coat of ashes, would be intolerably unclean. There is no attempt at a partition dividing parents from children; but our savage, who is certainly a polygamist, turns his adult progeny out of doors as soon as possible; his wives may be tolerably well conducted, but the less we say about his daughters the better. Against the walls hang his weapons—his club, his spear, his bow and arrows; with the latter he shoots his fish, and his extemporized bow of birch-bark, fastened with strips of hide, serves him for a course; his fishing lines are plated by the women, possibly of hair, probably of flax or tree-fibre. His stone pestle denotes the knowledge of some grain, which he pounds and mixes with water, like the goit of the Guanches.*

His salt-cellar is the sea; his pottery suggests the use of milk and curds, oil, wine, and perhaps mead and hydromel. He has no stores—no smoked nor sun-dried fish; he is improvident as he is omnivorous, at times revelling in venison, turbot, and the glorious palmarus of these seas; at other seasons supporting life by small shells, triturated buck, and whatever is edible. Most probably he is a cannibal. All primeval races were anthropophagi, according to the tradition of their friends, except a prehistoric village in Scotland, whose name I forget, but which has been claimed (by Scotishmen) as an exception to the general rule.†

* [The "crowdy" of the Scotch, and the "lute" of Central America. — C. C. B.]
† [Capt. Burton here refers to Mr. Samuel Laurence's extraordinary work, "Prehistoric Remains of Caltisla." Of course the local feeling amongst the Koster was very strong against Prof. Owen's supposition that some of their ancestors were cannibals. — C. C. B.]
processes, however, he devours only the dead bodies of his enemies. His cattle and goats—perhaps he has sheep—supply him with sealing, and at times with food; he and his family wear the skins, with the hairy side in—not out, as is the absurd fashion of the highly civilized—and he tattoos, especially on the chest and stomach, a "poor man's plaster," as a defence against intemperate air. His only ornaments are the teeth of his enemies and balls of red clay, worn like necklaces, the earlier form of the bead. His women are not wholly ignorant of spinning, and, if so, they make fishing nets. He spends his time dozing in the sun or sleeping near the fire, except when compelled by hunger to reap his corn, to hunt, or to lift his neighbour's cattle, for which crime, if caught, he will be duly knocked on the head and eaten.

A similar state of things may still be seen amongst the Orobi or mountaineers of East-African Usagara: the latter, however, have abandoned cannibalism, and have learned the use of metal.

Richard F. Burton,
Vice-President Anthropological Society.
Trieste, December 9th, 1873.

P.S.—Shortly after this paper was written, Baron Carl von Ozernig (Junior), of the Finance Department of Trieste, favoured me with the proof sheets of an able article which he has contributed to the Transactions of the German Alpine Club, entitled "Rundtoure um den Monte Maggioro, Die Kohlengruben von Carpiano, geschichtliche und vorgeschichtliche Notizen. Von Carl Freiherrn von Ozernig," it has been published in the "Zeitschrift des Deutschen Alpenvereins," Redigirt von Dr. Karl Hausshofer. Jahrgang, 1873, Band iv., Hefl 2, Munich, 1873. We have thus written simultaneously and independently upon the subject of prehistoric Istria, although Baron von Ozernig visited the sites before my second excursion. Meanwhile, I have to thank my distinguished collaborateur for a copy of his plan of the Castellare di Cunzi, which I have thus been able to compare with my own that is now offered to the readers of Anthropologia.

Discussion.

Professor Leitner said it was very gratifying to find that Captain Burton had lost none of the vigour which had made him so deservedly famous. The drawing exhibited seemed to him almost identical with one he had seen of some Bhilas topes; but he would not on that account throw out anything like a suggestion of similarity between remains in such distant parts of the world. Captain Burton

* Sig. Carlo da Franceschi showed me some specimens, whose enlarged central holes proved them to be primitive beads; those with smaller apertures may have been spindles, like the articles still used by Bushy savage races.
away, are of comparatively recent origin, and were adopted by post-Celtic people from the usage of their predecessors; the sequence of ages becoming thus most difficult to determine. On the other hand, if the circles are really Celtic, and were used in the places where they occur by the Celti, then we shall have to explain how they got into Istria, which, if satisfactorily accomplished, will extend the known area of their former occupation farther than Anthropologists have been wont to allow. The restoration of hut circles by Captain Burton is, after all that may be said against it, perfectly legitimate upon the evidences he has gathered during his researches. But it forms a rather dangerous precedent, when the materials at hand have not been thoroughly worked. It must be regretted that so much collateral and irrelevant matter had been imported into an otherwise extremely important paper. All true lovers of Archaeology must wish God-speed to the gallant author in the pursuit of science, which means the pursuit of truth.

Dr. Carter Blake thought the present was one of the most important papers which Captain Burton had contributed, and that it was purely anthropological. The Castellieri appeared to him to be most like the structures which Mr. G. Tate had discovered in the Cenotaph hills, especially those at the foot of Hedegope and at Yevering Bell. They were unlike the hill forts of Sussex, inasmuch as the latter contained chipped stone implements, but the Istrien remains entirely polished stone. He believed that the remains from Pantalicia, to which Mr. Caiardi had alluded, were more ancient still. The Anglesey remains were probably merely Celtic, at least if the Twenty-year-Capel skulls were to be taken as a test of the characteristic skull formation. He hoped that Captain Burton would continue his explorations.

Mr. Lewis said it would be sufficient for the mere Archaeologist to know that the remains so admirably brought to their notice by Captain Burton were ancient and curious, but the Anthropologist would ask whether there were any such peculiarities about them as would identify them with those of any other part of the world. So far as he could see, there were no such peculiarities; resemblances, even to some of the British enclaves, there might be, but none such as might not have arisen from accident. Captain Burton had accused the inhabitants of the Castellieri of paganism, without so far as he could see, any evidence to support him; and he hoped that no European people had ever been addicted to it, if that be from it being almost, if not quite, a racial characteristic among them.

The President said the paper was especially interesting from the fact that we have really no previous information on the subject. Neither Spon, in his Italianische Dalmatinische Reise-Beschreibung, nor Bialetto, Viaggio nell’Istria, which records the travels of the king of the Goths, nor anything of the kind, furnishing works of Cussas, Toppo Pilgrim of the Istra, give any account of the Castellieri. Captain Burton had made some queries on the local names, and had asked his (the President’s) opinion upon them. The word falsa might corrupt from the Ilyrian word *falsa*, which is translated “splenius;” or, as suggested, it might be from Latin *pota*, or its root, the Greek *pédos*; or it may come from the same root as the Gothic *skepm*, i.e., *skempr*, prefixed by a diminution, or from *plavia*, like *fama* from *plauere*. A Celtic origin of the Ilyrian *potus* is improbable. The usual derivation is from *Pitius Iulii*, which is not more far-fetched than *Pitius* and *Iulii*, from *Pitius Iulii*; but Captain Burton thinks the passage in Pliny, “Pola, now *Pitius Iulii*,” proves that the appellation Pola is more ancient. Pola is the Ilyrian term of the name, and in that language *pol* is *palca, palca* is *palca*, and *palca* is rendered “fararces.” Again, in old Italian, the appellation *Polca* is used as a synonym for *Punca*, like the masculine *Pulca* for the name of the wife of Lucan was named Argentaria *Polca*; and in Cicerone we read of Servius *Pola*. There is a Pola river in Russia, and six places in Spain in which the word Pola forms part; as *Pola de Albareda*, there is the *Pola de la Venta*, near *Velletri*; *Pola* in Calabria; *Polo de Pala* near *Sinaca*; and a Porto *San Paolo* near a little north of Polai in Istria. Others say the Celts had on their journeys, not being able to fulfill their mission, took refuge in Istria, and founded Pola, whose name in their language signifies “exiles.” This seems to have originated in a verse of Callimachus (mentioned by Strabo) who calls the place Apollon pyrgou. I do not find such a word as pola, with such a meaning, in any of the dialects of the Celts, but this proves nothing, because, with such imperfect vocabularies as we possess, we could not expect to find it. Bohart inclines to the derivation, and refers to Hebrew *pola* separata, *pulca* separata. Such derivation assumes that the Celts had a like root word, and the Hebrew has moreover several words for “fararces,” none of which are from *pula*. With regard to the name of Istria, it is said that Celts having sailed up the Ister, i.e., the Danube, passed from that river to the Adriatic, and that they named Istria from the Ister; but, as Spon observes, if the Celts proceeded from the Ister to the Adriatic, they must have carried their vessels on their shoulders, inasmuch as there is no water communication between that river and the Adriatic. Something to this effect is mentioned by Pliny; only the latter makes them pass to the Adriatic by way of the Save. Indeed Spen’s ingenious suggestion seems to have been founded on the serious statement in Pliny. That the Celts may have reached Istria from the mouth of the Ister, the Euxine, and the Dardanelles, is quite another thing. It may be here noted that Myria derives its name from the river Steyer (etymologically the same word as Ister), a small river which gives name to Steyer and Steyerdorf, and falls into the Danube just below Linz. Other derivations of the name Istria might be from the Istia or Hosti, an ancient Ilyrian people with whom the Romans had several wars. Again, Istria being almost surrounded by water, the appellation might be derived from the Celts *deer*, water; which, with a prefixed syllable, becomes in European river names, *Steuer, Steir, Steyr, Ister, Steine, Abby, Oyster, &c., &c.* Further, it frequently happens that large districts take their name from a town; as Yorkshire from York.
APPENDIX.

The following is an interesting letter sent by a well-known name in Istria to the Princesse paper. It deserves reproduction in extenso and the reply has been added at full length —

I CASTELLIERI DELL'ISTRIA.

In Istria si trovano in punti eminenti ed in numero considerevole delle rovine che portano in italiano la denominazione di "Castelli" o in latino quelle di Grad, Gradina, "Gradicia"; Gradiche, Gradiche (abbiamo supposto che fossero costituzioni greche, tradizione infondata come lo dimostro il dottissimo Dr. Kandler, poiché il debole governo dell'impero orientale non lasciò quasi vestigia di se meno ancora tale che avessero un imparto nazionale greca.

I nostri eruditi propendevano a ritenere i Castelli come opera romana; l'Istria possiede tanti monumenti della grandezza romana, tanti testimoni visibili dell'importanza che il governo romano attribuiva al possesso di queste province, che in difetto d'ogni indizio storico sull'origine dei Castelli l'idea che fossero un sistema di castri romani veniva quasi da se; si osserva che da un castelliere si vede l'altro, e ciò fa supporre che questi castri potessero corrispondere mediante un telegrafo ottico.

Questa ipotesi non appagava per altro tutti i pensatori e i quali opponevano che i Romani non usavano disperdere le loro forze, lasciavano libero movimento ai popoli conquistati, per poi di altro a severamente punirli in caso di ribellione. Le fortificazioni devono stare in proporzione col presidio e viceversa; si si considerava il numero e l'ampiezza dei castelli si dovevrebbe giudicare che migliaja di militi fossero sacrificati a presidiare quei fortalizi in luoghi deserti ed inospitali, mancando quasi in tutto l'interno dell'Istria tracce di città oggi esistenti ai tempi romani. Ciò non corrisponderebbe alla saggezza politica e strategia di quel popolo conquistatore.

Qualcuno era disposto a ritenere i castellieri opere di popoli aborigeni per difendere la loro indipendenza contro i Romani. Quest'opinione meritò d'essere presa in considerazione constando quel'ascolta diffusa che molti Istrian oppresso alle armi romane. Ma siccome i Castellieri furono non furono trovati iscrizioni, armi o altri documenti che attestassero la loro origine romana, helene, traciche, liburniche, ibero-giudiche, etc., restava sempre il dibattito, e si era pronti a accettare uno ipotesi che presentasse qualche probabilità.

Recentemente la scienza Geologica ed Antropologica ha in base di ripeto scoperto un nuovo, che in epoca remotissima e preistorica vivevano in Europa contemporaneamente all'Oro e delle epoche, all'Elefant primigeni o al Rinoceronte ed alla Tenna una razza d'umani diversa dalla nostra. In Svizzera e nell'alta Italia furono trovate delle palafittes nel fondo di laghi con residui di uomini e di animali, dallo studio de quali e degli ordigni ivi scoperti, di cui si servivano questi uomini, risolto, che in tempi ovve le belve feroci contrastavano loro seriamente l'esistenza trovarono salvezza costruendo inferiori villaggi sopra palafitte, laghi. Ulteriori scoperti, principalmente di armi e insediamenti di pietre, oro o bronzo, contribuirono a formare un razionato sistema del progresso e sviluppo dell'umano primitivo e la divisione in epoche, così si parla dell'età della pietra cui corrispondeva quella da trogloditi, e a questo succedette l'età del bronzo di cui già si trovano vestigia presso le palafitte.

Un sogno evidente che tutte le anteriori ipotesi riguardanti i castellieri istriani non erano soddisfacenti e si è quello che molti ora vanno dover più riportare l'origine de castellieri ad una delle accese età preistoriche. Quellino sarà stato il primo ad esternare un tale pensiero, molti lo hanno avuto contemporaneamente e in generale si ragiona così: se nel Belgio e nella Francia ed in altri paesi dell'Europa si trovano scheletri d'umani viventi in epoca molto remota, se nella Svizzera ed alta Italia si trovano vestigie di palafitte e di inferiori villaggi di uomini che vivessero sopra laghi, vi potevano essere contemporaneamente degli uomini anche in Istri i quali, non esistendo laghi, trovarono opportuno di costruire abitazioni fortificate sulle spine de monti. Perso in epoca di geologia ed antropologia scoperti superiori castellieri istriani di pignate di un cotto di forma molto primitiva ed asseveravano sulla superficie dei rispettivi resti un territorio inerente che sembravrebbe essersi formato da ceneri ed escrementi, indizi di abitato.

Così, stavano le cose non guadagnando, quando ad un tratto l'interesse questione entrò in una nuova fase: un celebre vingatore di paesi lontani e selvaggi che si fece un gran nome pubblicando la descrizione di suoi viaggi, visitando nell'antica scoro l'Istria trovò i nostri castellieri degli della sua attenzione e ne esaurì rilevati; egli si propose di ritornarvi e di continuare i suoi studi sui
castellieri; come riusciranno i nostri eruditi Signor Tomaso Luciani intende accompagnare l'illustre viaggiatore nell'accennata escursione scientifica, e tali celebrità vi sono peggio che la questione verrà studiata a fondamento tanto dal lato preistorico ché dallo storico.

Informati noi d'un tanto, volentieri ispezionare uno de' castelli visitati dal celeberrimo viaggiatore, e vi si recanno col servir proposito di lasciare a casa ogni preoccupazione.

Racconteremo in breve l'impressione che ci fece: In cima d'un monte con superficie or di strati calcari or di terreno composto di detrito marinoso ed arenario si trova un vasto piazzale circondato da alte e larga macerie di pietre calcari di cui alcune soprassono il vertice del monte di cui. Dal lato ove l'accesso e sinistra e quella onda è una sola cinta, da tutti gli altri lati la cinta è doppia, sicchè il recinto interno rappresenta un elisso e l'esterno una mezzaluna.

Non avevamo tempo di esaminare il terreno, ne di cercare rottami di cotto, naturalmente non ci si presentò nessuno così pure non poteremo scavare traccia di cemento fra le pietre; noi non potevamo fare altra conoscenza, che quel luogo sia stato destinato dalla popolazione del vicino contado per raccolglierli il loro bestiame ed averli mobili onde potersi diffondere da un agglomeramento nemico.

Quanto all'epoca in cui fu costruita la macerie non ci potevamo fare un'idea nemmeno approssimativa; antica o certamente come lo indica il coloro delle pietre ed il muschio che le ricopre, conosciamo però agli avvicendati che non hanno un secolo d'esistenza le quali presentano un aspetto poco diverso.

Considerato che i più celebri geologi sono concordi nell'attribuire alle palafitte per lo meno l'età di 10,000 anni, noi dobbiamo ingenuamente confessare che quelle macerie non ci fecero l'impressione d'un età tanto veneranda, e potremmo addirittura anche qualche ragione in sostegno della nostra opinione: il geologo Stache che più d'ogni altro studiò la nostra stratificazione ha dimostrato essere la marina che all'arenario la più giovane formazione dell'Istria, esserne spartita moltissima per degradazione, ed essere in molti siti comparata alla superficie la pietra calcare un tempo coperta da strati arenario-marnosi. Questa teoria ha persuaso tutti quelli che osservarono il nostro luogo.

Il piazzale del castelliere in discore presente pietra calcare sporca, la macerie è fatta di questa terra e si doveva trovare nel vicinato; il piazzale non era dunque coperto di strati arenario-marnosi quando fu costruiti il castelliere, per la quale cosa seguendo la teoria Stache, noi non potemmo ammettere un età enorme, e ciò tanto meno, che il detrito arenario-marnoso si trovava sul medesimo monte a poco distanza del castelliere. Ossa e altre parole: un castelliere costruito 10,000 anni fa in quel punto dove si trovava la teoria geologica dell'Istria essere composto di pietra arenario-marnosa. Dobbiamo ancora osservare che mai trovato traccia alcuna di abitanti ne di pozzi o stagioni d'acqua, lochò indicherebbe che il recinto in discore non poteva serviva che in momento bisogni di guerra. E ciò è quel poco che potemmo congetturare sul castelliere da noi visitato senza poter fare deduzioni riguardo ad altri che possono essere bene diversi.

Essendo nostro scopo di esercitar persone meglio di noi informate a pubblicaro le loro vedute riguardo ai castellieri onde prepararci alle notizie che attendiamo dalle insigni persone che si propongono di studiosi e professi, ci permettiamo di accennare alle varie epoche preistoriche e storiche che dovranno essere poste a confronto con i medesimi ed ai caratteri particolari di ciascun epoca.

I. Epoca preistorica: intendiamo quella s'inserisce nell'epoca delle palafitte. I trogloditi si rifugiarono in tempo di agitazione normica delle loro case, almeno ci par verbosamente; per stabilirsi occorre che dovrà valutare le condizioni geologiche attuali e le presumibili in quei tempi, di dovrebbero trovare tesi che devi unificare alla base della palafitta o abito sufficiente numero di attrezzi ed armi simili a quelle scoperte presso le sottolte palafitte.

I rottami di cotto sono un oggetto molto delicato in Istria ove e a Castel Rachele ne vanno fabbricati anche oggi di forma veramente preistorica; il confronto con cotti dei palafitte è pure indiscendibile. Un altro punto delicato è il terreno; terro di color nero vi sono anche altrove; l'analisi chimica ed il confronto de risultati ottenuti dovrebbero dare molto chiarimento.

II. Epoca degli aborigeni sono stati Celti, Traci, Flamati, Liburni o Giapidi, di caratteri distintivi di quest'epoca dovrebbero essere scelti avvicinandini alle forme attuali, armi ed instrumenti più perfetti di quelli che indicano l'epoca delle palafitte.

Guerre più feroci della conquista romana contengono gli avvenimenti dell'Istria, e gli Istrani devono aver fatte grandi opere di difesa per difendere la loro indipendenza dai conquistatori romani.

III. Epoca romana alle quali va congiunta anche quella dell'Impero orientale. Siamo certi che il verdetto di Signori esaminarono i castellieri non ci lasciava nessun dubbio, se siano di origine romana o meno.

IV. Epoca della 1^ immigrazione de Slavi. Non bisogherbbero scartare nemmeno questo tempo, si tratta di 12 secoli. Tanto gl'indigeni quanto gli immigrati potevano aver movisi di fare barriere per la propria difesa e del loro bestiame. Ci dispiace di non conoscere il linguaggio slavo per poter giudicare se le denominazioni che essi danno ai castellieri indichino castris, etc. o soltanto rovine de medesimi; nel 2^ caso sembrerebbe che li abbian già trovati in rovina e si dovrebbero ricogliere ad un epoca anteriore.

V. Epoca delle conquiste de Franchi non sembra aver causato grande spostamento di popolazione in Istria.

VI. Epoca delle scorserie de Turchi. In Carniola le invasioni turchi diedero origine a molti castellieri che ivi si chiamano "Tabor", parola d'origine asiatica che in Slavo ed Ungherese significa accompanimento ed in Turcho presso poco lo stesso.

Esso in succinto quanto il Barone Valvasor nella sua Cronica della Carniola pubblicata nell'anno 1689 (Vedi L. L., p. 112-231; L. IV., p. 539-540; e L. XV., p. 374) scrive sopra tale argomento: "Vi sono delle rovine in Carniola che non sono di castelli baronali ma diTabor ossia accatastamenti fortificati costruiti ad epoca delle..."
APPENDIX.

The moral certainty that this beautiful peninsula would be inhabited by archaic races. Washed by seas that abound in the finest fish; covered with woods and forests, which would harbour hosts of wild animals; situated in the heart of the temperate region, and enjoying every variety of climate, from the delicious and quasiaropical temperature of the western coast to the almost boreal atmosphere of the mountain range, bordering it to the east; with valleys of the richest soil fit for the growth of cereals, and with uplands where cattle, goats, and sheep can graze throughout the year—this “Eastern Tiberius” must have been a paradise for prehistoric man. Who can believe that cold Switzerland would swarm with pilio-villages; barren Scotland and comfortless Ireland with “troupeurs,” whilst Istria remained a desert? But M. de S. has distinctly no right to assume an antiquity of 14,000 years, nor are we required to dispose of his geological objection. Even those who believe in the settlement of the Celts in favour of which so many distinguished friends, such as G. T. L. G. (Istr. No. 67, 68, Oct. 30, 1847) observe, “To non ho com’altri il coraggio no di credere ciecamente no di assolutamente,” the furthest date would be 3,254 years (B.C. 1380+ An. Dom. 1874). But, further, the Romans did not penetrate into Illyria before B.C. 329, and thus “pre-historic” would here mean, not 10,000, but 3,254 years. The popular belief which attributes the ruins to the Greeks, who would have been, not of the Lower Empire, but Thrac-Kelus, is not to be dismissed with contempt: it distinctly separates the Grad from the Turkish “Tabor,” a word signifying a crowd, a battle, a column. As regards the Celtibrian settlement, for which we have the authority of Strabo and other geographers, we must bear in mind the direct assertion of Herodotus that these people sprang from the Egyptians, an Ethiope or Negro race who practised circumcision. The universal consensus of history declares the people of Illyria to have been Kelus. Many reasons justify the student, methinks, in assuming that the pre-historic races of Istria were Kelus, and in assigning to certain ruins of Istria an age exceeding twenty-one centuries. For parallels, I must here congratulate myself upon the fact of Novum Ilim being now restored to its place in the annals of the past, despite the nebulous myth-theory with which modern study has oppressed it, before the use of that ultimate ratio, the spade, had amassed exact knowledge entitling us to venture upon abolishing ancient Troy.

The position and form of the Castellieri. That admirable student, the late Dr. Kandler, decided that many of these were Romans, and doubtless he was not wrong. As Cav. Luciani remarks, Istria is a palmipede, upon which many a successive hand has left its traces.
The Castellieri near the great military roads would naturally be converted by the civilized colonists into guard-houses; of these many in Syria are still standing. But it is strange that Dr. Kandler, who by studying the works of Vegetius* was enabled to lay down with a firm hand the outlines of Aquileja did not perceive the radical difference between a Roman camp and a pre-historic settlement. The former were always parallelograms, squares or oblongs, built to accommodate a given number of soldiers; laid out according to rule, and caring less for strength of position than for free access to wood and water. The latter are almost invariably circular or oval, the form still affected by the savage African. They crowned the cones of hills or the heads of buttresses, and were disposed, not regularly, but according to the exigencies of ground. In no case they were built with mortar, as M. de S. thinks, an invariable characteristic of Roman fortifications. They are too far numerous for garrisons: the territory of Ambra, for instance, contains nearly twenty. They were not intended for temporary strongholds in time of danger, where each could resort, carrying water, fuel, and provisions; the black soil shows that they were permanently inhabited. None of them are provided with wells or cisterns, and we do not see the remains of many an inland Istrian town condemned, like their pre-historic sisters, to toll up and down the steep road with heavy water-pots upon their heads.

The surface of the Kunzi esenca is a brown humus, the decay of vegetation covering the "terrivo nero." I quite agree with our adversary that this "black soil" of the Castellieri should be submitted to analysis. But I may venture to say, in opposition to M. de S., that it exists nowhere in the Peninsula except where man has dwelt, and that it will be found to consist of ashes and other organic matter. Again, even in the Scoto-Scandinavian islands of modern Great Britain we have pottery as rude as the cotti which profusely strewn the "lignes" of the Castellieri: the practical eye, however, has no difficulty in distinguishing the old from the new. Our critic complains of not finding "cotti" at Kunzi; he might have picked up hundreds in the rubble of the walls.

But what completely upsets the objections of M. de S. is the presence in our Castellieri of prehistoric weapons, stone axes and arrow-heads. Assuredly these belong to the aborigines, not to the Romans. Whatever doubt there may be about the pottery, none can attach to the implements. The argument that human skulls and bones are absent is simply negative: the reply to it is that they have not been sought, and consequently they have not been found. How many excavations have been made in the Castellieri of Istria, or in the caverns which may be expected to yield such spoils! Absolutely none! Even till the last few years the peasants have ignored the value of many "finds," and they are not singular in the world. As time rolls on we shall doubtless dig up a greater number of stone instruments, and we shall come upon human remains.

And now, leaving generalisms, let us meet M. de S. upon an especial chapeau de bal, the Castelliere of Kunzi, or "Kunzi." For reasons which your readers must remember, he decides that it is not a fort, but a fold. For reasons which I proceed to state, I opine it to be, not a fold, but a fort. Shepherd would certainly not take the trouble to erect anything so laborious. The several lines of ramp or road leading up to it are grassy breadths, which still show them to have been the work of art. The summit of the hill has been plastered away with immense labour, and stones of unusual size have been placed to do the work of a rampart. The double encircling is unintelligible in a sheep-fold; perfectly reasonable in a village, where the cattle would require quarters distinct from the villagers. There is not a trace of houses, because the latter were probably built of wood and thatch, easily conflated with the ashes which strewn the ground. The stones may have been in two, or even three, thousand years. The want of water I have shown to be no objection: such buildings were made before the time of protracted sieges. These remarks, I may observe, are merely a sketch of the subject, which might be extended to a greater length than your limits, or the patience of your readers, would endure. Permit me, in conclusion, to offer my thanks to M. de S., and to assure him that, whilst looking forward to his future communications, I pledge myself to meet him whenever he thinks proper again to take the field.

Your most obedient servant,

RICHARD F. BURTON.

Trieste, February 25, 1874.

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* Casta autem, präsentem hoste vicina, in te semper famiáni sunt loco, ubi e lignorum et palmar et aqua suppetit copias" (lib. i. cap. xviii.).