

ON THE "LORICA TRILIX" OF VIRGIL.

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THE armour of Neoptolemus, presented by Helenus to Æneas, is described by Virgil (*Æn.* iii. 466) as being "*Loricam consertam hamis auroque trilicem.*" Again, in much the same terms, but fortunately somewhat more explicit, the poet mentions the armour of which his hero had stripped Demoleos, as "*Lævibus—hamis consertam auroque trilicem—loricam*" (v. 261). Servius explains the first passage by making "*hamis auroque*" merely a poetical equivalent for "*hamis aureis*;" adding, "*hamis autem catenis vel circulis significat,*" and "*trilicem*" he interprets by "*terno texter intexam.*"

But this loose explanation of a *technical* term, which the accurate Virgil may be supposed to use here in a definite sense, strikes me as very unsatisfactory; and I think a more correct notion of what he had in view may be derived from the consideration of existing specimens of the same manufacture. But in the first place it is necessary to understand the primary meaning of the term itself before proceeding to consider its application to a different material.

"*Licia*," now called "*leashes*," are certain threads with nooses at the ends used for "*decussating*"¹ the threads of the warp in weaving, and upon the number of which leashes the fineness of the web depends: thus a "*tela bilix*" is one where *two* leashes have been used; "*tela trilix*" where *three*, and so on. For example, Apuleius, the better to declare the fine quality of the cloth which the sophist Hippias had woven with his own hands, calls it "*triplici licio textam.*" Now Virgil transfers the term from the weaving of webs of wool or flax, to that of metal, and goes on to use its other form (xii. 375), "*Lancea consequitur rumpitque infixam bilicem—loricam.*" And in this passage he applies

¹ That is, separating each successive pair of threads so that they make the figure of X.

"bilix," with great propriety, to indicate an inferior sort of mail to that of the "trilix" in the royal coat, for the soldier wearing it is the identical Phegeus who, though aided by another porter, Sagaris, had so much difficulty in merely carrying upon their shoulders (doubtless suspended from a pole, like those carried by the squires in the Bayeux Tapestry) the costly defence of the giant Demoleos, as they bore it to the tent of their master, Mnestheus. And yet even this common "bilix lorica" was no despicable coat of fence, seeing that it prevented the forceful spear of Turnus for doing more than graze its wearer's skin.

These particulars lead us to a rational explanation of "trilix," as applied to mail—always, be it observed, coupled with the mention of *gold*. Supposing the ordinary texture of the steel rings in mail to be properly described by "bilix," then the addition of one gold link to every two of steel would render the descriptive epithet "trilix" both forcible and just. This is more than mere theory, for double-linked mail is found united with single-linked in the same piece of mediæval manufacture. In the very interesting standard (neck-piece) of mail, formerly in the collection² of Mr. C. Roach Smith, the upper part (where greater strength is required) is made of *six* rings united by a seventh, the other part by *four* joined by a fifth. Similarly, "Old Robin of Portingale" in the ballad, to prepare himself against the midnight visit of his wife's emissaries,—“put a silk coate on his backe, with mail of *many a fold* :”—showing that this multiplication of the links was the regular expedient where more than ordinary defence was required, and where the additional weight was not objected to. In this standard of mail therefore the links stand to each other, in the two portions, in the ratio of six to four—that is of three to two, or as the *trilix*³ to the *bilix* lorica—a very remarkable analogy. The introduction of this *third* link of gold into the Grecian web of metal would more than double its weight; gold

² Now, with the rest of that collection, in the British Museum. It is figured in his "Catalogue of London Antiquities."

³ The poets of the Norman era continue to use the term in its original sense. Guillaume le Breton describing the joust between Guillaume de Barres and Richard Cœur de Lion, says—" . . . fraxinus ibat gambesamque audax fœrat et

thoraca trilicem;" and in the "Roman de Gurin" we read—"En son dost vest une broigne trilice," which is a literal translation of the Latin, although Meyrick has invented upon the strength of this passage his "trellised" armour, an *impossible* defence, of intersecting bands of leather.

standing to steel in the relation of about nineteen to eight. The object the armourer had in view in this case was not additional strength, of which the precious metal from its comparative softness could impart little, but the embellishment arising from the combination of colours. In the same way Heliodorus describes⁴ the serpent zone of Chariclea as having its gold diversified with blue niello, so as better to imitate the particoloured scales of the reptile; and exactly the same effect would be produced in this mail-coat by the mixture of the grey steel and golden links. The consideration of the immense difference in the specific gravity of the two metals suffices of itself to upset Servius' rendering "of gold links in a triple web," for such a mail-coat would be so ponderous as to defy the endurance of even a Virgilian hero. We may safely infer that the ordinary Grecian mail-coat was pretty much of the same weight as those yet made for the African trade⁵ (namely, forty pounds), from a remark of Plutarch's, in his Life of Pyrrhus, where he mentions that the armour of Alcimas, the Thessalian (the strongest man in the army), weighed two talents (about a hundredweight); or "double that of any other soldier." Now in another passage the same writer (Lucullus) informs us that one talent in weight was considered the regular load for a porter to carry during a day's march⁶. The immense increase of its weight arising from the large proportion of the heavier metal that entered into the texture of Demoleos' mail-coat, as well as from the augmented number of its links, appears from the forcible expressions Virgil has chosen, "*vix illam famuli Phegeus Sagarisque ferebant multiplicum, connixi humeris*" (v. 263). A burthen, therefore, that required two ordinary men to carry it a short distance on their shoulders, and that too with much effort, cannot be put down at less than double the weight of the regular panoply.

The epithet "lævibus" seems purposely employed to express the highly-finished nature of this choice mail-coat:

⁴ "Æthiopica," iii 4.

⁵ Messrs. Wilkinson, Pall Mall, are named as the chief exporters. Their mail-shirts are still in great demand amongst the Arab and Negro chiefs of the interior. Lighter suits are made for the Spaniards of Venezuela, who have only Indian lances and arrows to en-

counter.

⁶ Mentioning the train of 30,000 Galatians following the Roman march in pursuit of Mithridates across the desert, lying between their own country and Pontus, each carrying a *medimnus* (a little under a bushel) of flour upon his shoulders.

its links were complete rings, having their joints either riveted or soldered, not simply pinched together and so forming a rough surface—a "squalens tunica," as Statius aptly styles the kind commonly made in the times of the Cæsars.

It is more than probable that Virgil, a deep archæologist, who had always got actual precedent for his descriptions of things antique, had really seen some famous ancient suit of armour of this very construction, perhaps a trophy suspended in a Roman temple like the golden shield of Hasdrubal, which Pliny notices as then fixed up over the door of the Capitol. Nay, more, he may possibly have had in view the actual mail-coat presented to Hannibal by the Galicians (a trophy very likely to come into the possession of the Romans, and certain to have been regarded as the most interesting of all historical relics) for Silius Italicus terms it (ii. 401)—"Textam nodis auroque trilicem lorica, tegmen nulli penetrabile telo. Hæc ære et duro Chalybum perfecta metallo atque opibus perfusa Tagi." Where the last words, "overspread with the wealth of Tagus," *i. e. gold dust*, must refer to the *lorica* alone; for he expressly describes the *helmet* as being "white," that is, of polished steel. And with respect to the latter, Silius adds a curious piece of information, "vibrant cui vertice conii Albentes niveæ tremulo nutamine pennæ." Showing that upon the helmet were affixed the *real* wings of some snow-white and costly bird, as with Virgil's Ligurian chief Cupavo:—

"Cujus olorinæ surgunt de vertice pennæ."

A fact determining the true nature of the *wings* invariably affixed to Minerva's helmet, upon the coinage of those times. The perusal of the poet's description of this armour brings conviction with it that he is merely versifying some authentic prose account of the magnificent presentation suit offered by the Spaniards to the Carthaginian general. The great (but, at the same time, only) value of the industrious Consul's long-winded poem lies in the very circumstance of its want of all poetic inspiration. It is self-evident the composer has always gone upon the principle ("majore cura quam ingenio," as his friend Pliny the Younger is forced to say of him) of dressing up contemporary memoirs (the *Commentarii*, then so abundant, but now entirely lost), in the literal phraseology

of Virgil—exactly as if nowadays some old half-pay officer *malefeciatus homo*, were to amuse his idleness by singing the Crimean campaign in a cento of Miltonic lines, drawing all his matter unaltered from "Our own Correspondent's" letters of that date. Such a production would turn out as historically valuable as it was poetically worthless, supposing all its real sources to have been swept away in the wreck of ages.

Virgil again refers to the introduction of gold in the fabrication of armour of another metal, and this in a very curious manner (xi. 770)—

"Quem pellis ahenis
In plumam squamis auro consuta tegebat."

In this case the *bronze* scales were sewed upon the *leather* coat with gold wire, exactly⁷ as the steel scales in certain mediæval jazerines are with wire of brass. Virgil, in other places, mentions scale armour without further particulars; it seems to have been a common style of defence amongst the Romans of his day. Lucullus is described by Plutarch as putting on, before the great battle with Tigranes, at Tigranocerta, a coat of steel, formed like scales, which "cast a surprising lustre."⁸

To diversify mail by the interweaving of ornamental patterns in links of a different metal seems to have continued in fashion so long as that species of armour was used. The most tasteful employment of this art anywhere to be found is exhibited upon the effigy of a crusader in Hacombe Church, Devon, whose suit made of either brass or gilded rings has a very elegant floriated pattern carried over all its parts in a dark colour, evidently produced by the insertion of rings of steel. The mail petticoats later worn with plate armour, are often finished off with a vandyke of brass rings.⁹ Besides this partial introduction of gold, armour

⁷ Which fastening was probably made a conspicuous decoration of the surface of the coat, in the same way as were the silk cords that connected the plates lining the later brigandine.

⁸ Plutarch is here copying from Lucullus' own Memoirs, to which he definitely refers in other passages.

⁹ Michelet, describing Henri IV's preparations for his last projected campaign against the Spaniards, mentions his order-

ing a coat of mail with three great fleur-de-lys worked in it. Unfortunately he does not give his authority for this statement.

[The authority for this cannot be very difficult to find. In any case it were well to give Michelet's expression for a "coat of mail"—the ordinary article so-called was out of use in those days (1610). Henry wore plate armour. Michelet may have written familiarly of a *cotte*, some

made entirely out of that precious metal is continually mentioned by the classic writers. To begin at the beginning, we have Homer with his golden suit of Glaucus valued at ten times the price of one in bronze; and, to descend to historic times, Plutarch relates how, when Antony was blockaded in the city of Alexandria, Cleopatra presented one of his soldiers, who had distinguished himself in the first skirmish, with a helmet and cuirass of gold—with which he very prudently the same night went over to the winning side. Dio Cassius also tells us that when Tiridates passed through Asia on his visit to Nero, his favourite Queen rode by his side during the whole journey, wearing a golden helmet to conceal her face. And in our own country the celebrated golden corselet from the tumulus at Mold (fragments of which recovered from its stupid destroyers are to be seen in the British Museum) attests that similar magnificence was not unknown to the Celtic princes of prehistoric times. Such gorgeous defences, besides gratifying the vanity of the wearer (the principal object of their fabrication) may still have yielded him protection not much inferior to that of the customary material, bronze. For gold, when alloyed with one-third of pure copper, acquires a hardness equal to that of bronze, and this hardness was capable of being considerably augmented by the process of cold-hammering and tempering, with which the primitive armourers were so familiar, as their weapons in the latter metal convincingly declare. The most striking illustration of this fact are the chisels used by the prehistoric miners of Lake Superior, which are found to cut the actual native copper, from which they were formed (without the aid of fire) with greater facility than the steel implements of their successors.

In connection with this subject may be mentioned here a species of curiously constructed mail, which I believe has hitherto remained unnoticed. It is evidently made by twisting steel wire (size No. 14) over a rod the thickness of the little finger, so as to produce a continuous cylinder of any convenient length. This cylinder was then cut into short pieces, of three revolutions each of wire, thus pro-

kind of surcoat, perhaps, or even loosely of some article of military equipment, calling it a *cotte de mailles*. The fact is

worth looking up. (Note by Mr. Albert Way.)]

ducing flat and relatively broad rings. These rings being slipped successively one within the other (by the usual process of weaving the mail coat) formed a very close and compact texture; the elasticity of the wire causing its triple revolution in each ring to close exactly after the admission of its neighbours, whilst the broad surface of each link permitted but little play to the completed web. This manufacture came to my knowledge by accident at Florence, in the winter of 1847-8, where, in a brazier's shop, I saw lying on the counter some pieces of it about 4 in. square, and found upon inquiry that the man had been in possession of several jackets of the same sort, but had cut them up successively for the purpose of polishing his wares, with the exception of two perfect jackets, which he had just before my coming sold to a French antiquary. It may be remembered that Sir S. Meyrick once rescued the last fragment of a very early mail-shirt from a rope-maker in his own vicinity, the rest having perished in the inglorious office of smoothing new-made cord. The total disappearance of mediæval mail is thus accounted for—more fatal enemies than Time's cankering tooth were craving for its destruction. The principle on which this Florentine mail was made is evidently an excellent one: the tripling of wire in each link obviated all danger of gaping, and supplied the place of the tedious and costly expedient of riveting every one in succession. The only objection was the large increase of weight in the whole jacket from the multiplication of rings; but this again had the corresponding advantage of rendering the texture, through such unusual compactness, a better defence against the stiletto point, to resist which was probably the main destination of these Italian *giacche*, worn as "secrets," or "privy coats" *under* the clothes—not for armour on the field. Such a mail-coat might also with propriety be called "lorica trilix," if the triple nature of each link were alone to be taken into account.

NOTE.—The Haccombe figure, above referred to, will be found very accurately drawn in Mr. Crabbe's "Account of Haccombe Church," a paper read before the Archæological Association, Aug. 23, 1861, and published separately. (Pollard: Exeter.) It is figured also in Lysons.