

THE CORRUGATION IN AFRICAN SWORD BLADES AND OTHER WEAPONS.

BY WALTER HOUGH.

There is a feature in African iron weapons of nearly all descriptions of a flexure in the median line of swords, knives, assagais, arrows, etc. The horizontal section of a weapon with this characteristic is like a thin letter S, or Hogarth's line of beauty, with a little less curve at the edges than the latter. In some weapons it is a strongly marked ogee corrugation. On each face a portion of the blade is sunk on one side only, and on the other face the depression is on the reverse side.

There has been much conjecture by ethnologists and collectors as to the use of this notable structure. It has been supposed to determine a spiral flight in weapons. As it occurs not only in missile weapons, as arrows and assagais, but also in trenchant weapons, as knives, swords, bills, and short sword-knives of the Congo natives, where the peculiarity is useless, this reason is not valid. It has also been called a "blood groove," and such fanciful stories about its purpose to retain blood of enemies, or to cause a wound made by a weapon to bleed more freely, may be dismissed with scant notice. Burton, in his exhaustive work "The Sword" (p. 170), calls attention to the remark by Col. A. Lane Fox on the African corrugated sword in *Anthrop. Coll.*, p. 135, but makes no explanation of it. He makes, however, the interesting remark that this peculiarity is persistent in all the swords obtained from the Caucasus, and that the iron blades of Saxon and Frankish spears found in graves in England and France possess it.

In examining a short or half sword brought by Lient. E. H. Taunt, U. S. Navy, from the recently explored country of the Bakoubas, on the Kassai River, Africa, I was led to believe that the semi-fold in the blade was only a very effective way of making a thin, soft-iron blade rigid on the principle of the hollow column.

The sword spoken of (Catalogue No. 129,929) has a leaf-shaped blade, only 12 inches long, while it is nearly 8 inches wide. The blade, a very superior piece of blacksmithing, is like thin sheet-iron, yet it is made very strong and unyielding by this device.

I think that wherever blades of thin, soft iron are to be made we will find this ogee fold, as in the backs of scythes, etc. The bronze scythes, sickles, and some knives of the Lake Dwellers were strengthened in that way as in ours, and the spears of the Franks and Saxons required it too, because they were of soft iron. From what we have seen this is an invention of no mean antiquity, and it is held that the reason assigned is a *vera causa* in the matter under consideration.

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