

dynasty, about B.C. 1100. The nations discussed in the earlier volume were comparatively few, but when we turn to the later one we see that it treats of the history of all the peoples who lived in the countries which lie between Elam on the east, Cyprus on the west, Armenia on the north, and Berber on the south. How they arose, gained power, made war and invaded each other's territories, attained the zenith of their glory, were conquered, and were finally destroyed or merged in the ascending might of their neighbours, M. Maspero has undertaken to tell; and we think that he has carried out his task very fairly well. The overwhelming mass of notes and references to authorities testify to immense energy, and to a desire to put the reader in possession of a large number of facts. In the course of his work he has touched upon a variety of "burning questions," such as the Hyksos, the Hittites, the Exodus, &c., and we are tolerably certain that he will not please every one who reads his book; on many points we ourselves should disagree with him. To discuss these differences would require more space than we are allotted, and it is only fair to say that the general plan of the work is excellent, and that the author has spared no pains to make it a useful guide to the knowledge of Oriental history. On certain subjects his information is not obtained at first hand, but when we consider that he has to deal with Egyptians, Babylonians, Assyrians, Cosseans, Kassites, Elamites, Hittites, Arameans, Syrians, Hebrews, and others, this cannot be wondered at; and that he should be led away, at times, by his authorities is quite excusable. His chapters on Egyptian history are, as might be expected, worthy of his reputation.

The Camera and the Pen. By T. C. Hepworth, F.C.S. Pp. 64. (Bradford: Percy Lund, Humphries, and Co. Ltd., 1896.)

RELIEF blocks produced without the aid of the engraver are now extremely common—rarely do blocks of any other kind appear in NATURE—yet it is astonishing how very hazy are the ideas which the majority of people have as to the way they are made. In this slender volume will be found a sketch of the methods employed to produce line blocks and half-tone blocks, and we trust it will be widely read; for a knowledge of the possibilities of process work would often save the production of a bad block. The simplest form of process block is that made from line drawings, or pen-and-ink sketches. To obtain the best effect, the drawing should be made on Bristol board, or similar white surface, in very black ink. Liquid india ink is commonly used, but Stephens' ebony stain is sometimes preferred. This is photographed by the process worker, and, by a simple arrangement, a reversed negative is obtained. A sheet of zinc, covered with a substance which becomes insoluble after exposure to light, is placed in contact with this negative, and afterwards the unaltered parts are washed or rubbed off. The zinc plate thus marked is then etched, and eventually mounted on wood ready for the printing machine. It will be evident, then, that drawings to be used for the production of blocks in this way should be very distinct, and no lines or marks should be upon them but what are required to appear in the figure. The half-tone process is used for the reproduction of pictures other than line drawings. For illustrations of natural things and phenomena, where accuracy is all-important, reproduction by photographic process may be said to be essential. The only conditions for satisfactory results are clear pictures, which may be either negatives or positives.

Many hints of interest to photographers, as well as very instructive information on the processes of manufacturing blocks for illustration purposes, will be found in Mr. Hepworth's book. The only complaint which is likely to be raised about the contents is that they are deficient in details.

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LETTERS TO THE EDITOR.

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Bog Slides and Debacles.

THESE slides have been brought very prominently forward on account of the recent debacle near Gneevegullia, Co. Kerry. They are a subject that ought to be known and understood, as numerous observers and writers have brought the subject before the public since Gerrard Boate wrote on bogs in A.D. 1652, up to the present time.

If, however, we are to judge from what has been lately written, the public seem to be supposed to consider such a slide as that in Kerry as something quite out of the common, which no one can understand. But, on the contrary, bog slides and debacles are one of the numerous Irish disturbances, that lie dormant for a time and burst forth suddenly when least expected—take Gneevegullia Bog as an illustration. It is situated on the watershed of the Brown Flesk, a tributary of the Maine, the Blackwater and the Flesk, into all which rivers at times it sent squirts, but especially in late years, into the Quagmire River, a tributary of the Flesk. Into the latter river it sent a considerable squirt three or four years ago; now it breaks forth into the Flesk instead of the Brown Flesk; where it was always expected to go.

Small slides and debacles of both bogs and drifts, in the Irish hill groups, are not uncommon, and any frequenter of the hills must at some time or another have seen one. They give the observer a very nasty sensation. Suddenly he sees a curious shiver in a bog flat; at first he considers it to be only the shimmery air over the bog, so usual in hot weather, but presently he sees a "creeping where no life is seen," with a black steam or sheet issuing from it. Ten to one he immediately jumps up to make sure that his seat has not also taken to walking. Most bog slides are hard to see, as they usually take place during the night; there are, however, exceptions to this general rule, as the famous slide in the Ballykillin Bog, near Clara (1825), took place while the turf-cutters were at their dinner, and the slide on March 28, 1745, near Dunmore, Co. Galway, also took place in the day-time, and the turf-cutters had to run for their lives.

In the annals of the Four Masters there are records that must refer to either water-spouts or bog debacles, but they are too vague to quote. Gerrard Boate, in 1652, tells us how to drain a "shaking bog," but he does not record any movements. The first I know of is the communication to the Royal Society in 1697, by W. Molyneux, of the Bog of Kapanihan, Co. Limerick, near Charleville. As this began at 7 p.m. on June 7, 1697, the first movement of this bog could be described; afterwards he gives the final results, and the causes that made the movements. The newspaper reports at the time talk of the accompanying great noise; Molyneux, however, says there was none. The Bishop of Clogher also gives a good scientific account of a bog movement near Clogher on March 10, 1712; but the majority of the other records are by men who have gone in for sensation. This has been the case in the recent reports. No one knows when the movement began in the Gneevegullia Bog, but now we are told it was heralded in by noises and great shaking.

The printed records of big slides or debacles that I have read (as far as I can remember) are the following:—

- 1607. June 7. Kilpanihan, near Charleville, Co. Limerick.
- 1708. Castlegarde, Co. Limerick.
- 1712. March 10. Near Clogher. This bog had also moved, according to tradition, before 1640.
- 1745. March 28. Addergot, near Dunmore, Co. Galway.
- 1780. Monabogh, Dundrum, Co. Tipperary.
- 1819. Valley of the Owenmore, Erris, Co. Mayo.
- 1821. Slip in Joyce County, Co. Galway.
- 1824. December 22. Ballyroindallow Bog, near Coleraine.
- 1825 (?). Kilmalady Bog, near Clara, King's Co. Fasset Bog, 16 miles away, also moved, but did not burst forth.
- 1867. Glen Castle Hills, Belmullet, Erris, Co. Mayo.
- 1871 (?). In the Valley of the Suck, alongside one of the Roscommon tributaries.
- 1871 (?). Clonagill, near Birr, King's Co.

Other big slides will be found recorded by Lewis, but it would take time to go over all his County histories.