the Caribou Eskimo of the interior, west of Hudson Bay. These people, in the view of K. Birkett-Smith, are a relatively unchanged remnant of the population from which all other Eskimo arose, while Matthiassen regards Thule as the original Eskimo culture and the first to spread eastward over the Arctic coast of America. D. Jenness, on the other hand, has recently put forward the suggestion of a triple division of the present-day Eskimo of Canada in which the natives of the Mackenzie River delta descend from old Thule people who migrated from Alaska to the eastern Arctic a thousand or more years ago, dropping colonies on the way; a second division on the Barren Grounds behind the Hudson, the inland Eskimo, survivors of the primitive Caribou; and descendants of the Eskimo who, about A.D. 1200, flowed out of the inland 'reservoir' and occupied the whole coast-line from Coronation Gulf to Labrador, overwhelming the earlier coast dwellers.

On the grounds of cultural succession, it seems best to assume two reservoirs of population at the beginning of the Christian era, one in Alaska and one in the central Arctic, which must once have been united, presumably before the development of the earliest known culture in the west, the old Bering Sea culture.

Hence it follows that for interpretation of the Labrador physical type comparison with (*a*) the "Old Igloo" (Birnirk) type from Point Barrow, the oldest known, which has been identified by Hrdlička; (*b*) the Thule; and (*c*) the Dorset physical types is an essential. Unfortunately, as already mentioned, the Dorset type is unknown, while the Thule type was identified only recently (Fischer-Möller, 1937).

The indications of comparative study of the measurements as a whole are that the Labrador skull is small. Metrically, Greenland bears the closest resemblance to Labrador. The main physical changes indicated in a comparison of the old stone grave material and that of the recent grave series is that, as compared with the pagans, the Christians have smaller and shorter heads with longer and narrower faces, relatively higher orbits and relatively narrower alveolar arches. It is uncertain whether the nose has changed. Stature reconstructed from the measurement of the long bones is as follows: old stone graves, 161·4 (male), 150·3 (female); recent graves, 161·2 (male), 149·8 (female). This suggests that Eskimo stature has decreased in Labrador since the eighteenth century, a conclusion borne out by the findings on the living. Two stature groups can be distinguished: (1) a low-statured group averaging in the males about 160–162 cm., found chiefly in the east (Labrador, southern Greenland), and (2) a high-statured group, 164–166 cm., in the males, found chiefly in the west, but also among the Thule people in the east.

To sum up, it may be said that these data on the prehistoric Labrador Eskimo establish more firmly the fact that the physical type represented is much the same as that predominant in Greenland; it differs materially from that of the western longheads (Old Ingloo). Also it contrasts with that of the Thule. Assuming that Labrador was populated originally by Thule people, the type did not survive. Whether the Labrador and Greenland type was derived from a mixture of the Thule and Dorset peoples, or a representative of the latter alone, cannot be decided until the Dorset type is identified.

SEVENTY YEARS AGO

NATURE, vol. 1, April 28, 1870

Early Torpedoes

THE first of a series of articles on "The Science of Explosives as applied to Warlike Purposes" appears, and deals particularly with history of the use of explosives as floating or submarine mines and torpedoes.

The earliest form of marine mine appears to have been the 'explosion ship' used by the Dutch to destroy a boom or boat-bridge constructed across the Scheldt in 1585. Several flat-bottomed vessels loaded with gunpowder were sent against the boom, exploding when they reached it. A development of this was the 'floating petard' used by the English during operations in Rochelle in 1628; this consisted of a sheet-iron case filled with powder which was exploded by a match-lock mechanism set off by contact with an obstacle.

An American, Robert Fulton, seems to have been the first to use the term 'torpedo'. His device consisted of a metal vessel holding about 100 lb. of gunpowder and fitted with clockwork to release a flint-lock at a determined time. The machine was partly encased in cork so that it was a little heavier than water, and was attached by a line to a box float. The torpedoes were carried in harpoon boats, and connected by long lines with harpoons fired from small guns at the ship to be attacked. If the harpoon was successfully planted, the torpedo was drawn into the water by the line, the clockwork firing mechanism released, and the torpedo exploded by the time it had drifted near the vessel attacked. Demonstrations with these torpedoes were carried out before English naval authorities in 1805. A diagram of a torpedo and its harpoon is printed.

Extensive use was made of mines, or torpedoes as they were called, in the American Civil War, both mechanical and electrical means of ignition being used.

Legislation and Nature

"THE effect of Legislation upon Nature is one of those far-reaching subjects which men are only just beginning to investigate in a practical spirit. . . . Neither directly nor indirectly, in fact, can we touch Nature by our laws, without beginning a new chain of causes, the end of which we cannot foresee."

Mr. E. Goadby is discussing an item in the Budget introduced by Mr. Lowe. "The freedom of firearms from taxation affects their number in any district, the number of guns determines the number of small birds, and the number of our small birds affects the immunity of our fields from grasshoppers, cricket-moles, beetles, locusts, slugs, etc. Mr. Lowe was concerned for the security of life, for the prevention of early quasi-poaching habits, but his 1 *l.* tax may effect a revolution all the same."

Another topic also discussed by Mr. Goadby is the rating of woods and plantations. He refers to the incidence of insects in relation to trees, and concludes: "Disafforesting threatens to become as common in the nineteenth as enclosuring was in the sixteenth century. Are we wise to hasten it?"

THIS issue of NATURE completes the first volume of twenty-six weekly issues, price 4*d.* each. The volume includes 558 pages of text and 110 pages of advertisements.