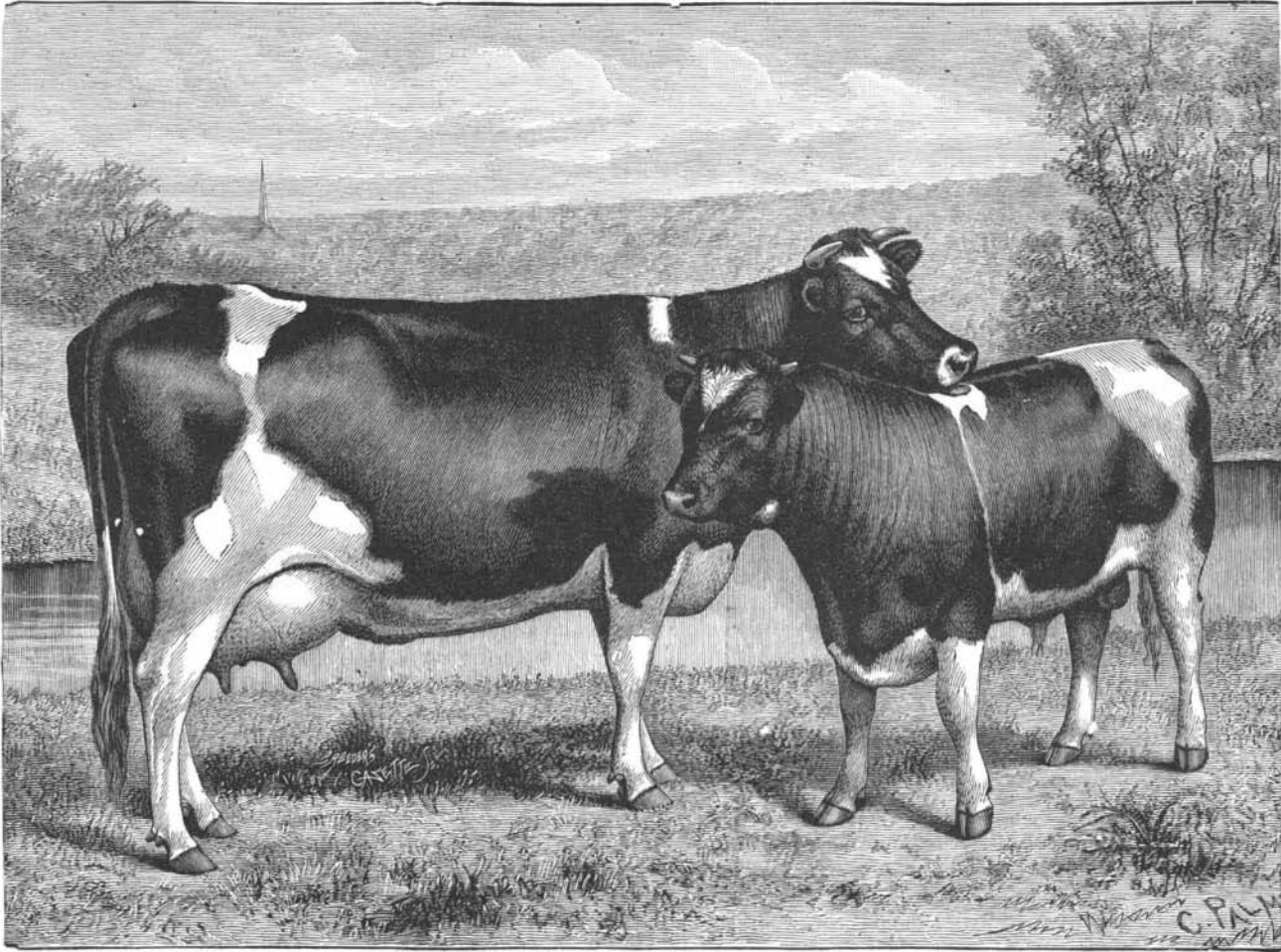


HOLSTEIN CATTLE.

Much confusion seems to exist in the minds of many concerning the Holstein and the Dutch belted cattle, a splendid example of which was published in the SCIENTIFIC AMERICAN a few weeks ago. The difference between the two varieties is quite marked, as may be observed by comparing the two illustrations. The Holsteins were a prominent feature of the late cattle show in New York City, and attracted universal attention. They are wonderful milkers, and although the milk is not of the richest quality, this breed has come much into public favor. The cow in the accompanying cut, Mechtchilde (6,718 H. H. B.), is the property of Mr. F. C. Stevens, of Utica, N. Y., and, as a three year old, she has made a record of 83½ lb. of milk in one day, 2,100 lb. in one month, and 9,033 lb. in five months, all of which demonstrates her capacity as a milker. The bull Sir Mechtchilde (3,727 H. F. H. B.) tipped the scales at 1,240 lb. when only twelve and one-half months old.



HOLSTEIN FRIESIAN COW MECHTCHILDE AND BULL SIR MECHTCHILDE.

Le Progres Militaire, in an article on "The Proportion of Artillery," argues that one of the principal causes of the defeats of the French in 1870 was the inefficiency of guns, both in number and material. The new calculations give 17 batteries to each *corps d'armee*, but the Germans are working to furnish each corps with 20 batteries, or 120 guns. The essential tactic of the arm is admitted to be the entry into action of the whole force *en bloc*.

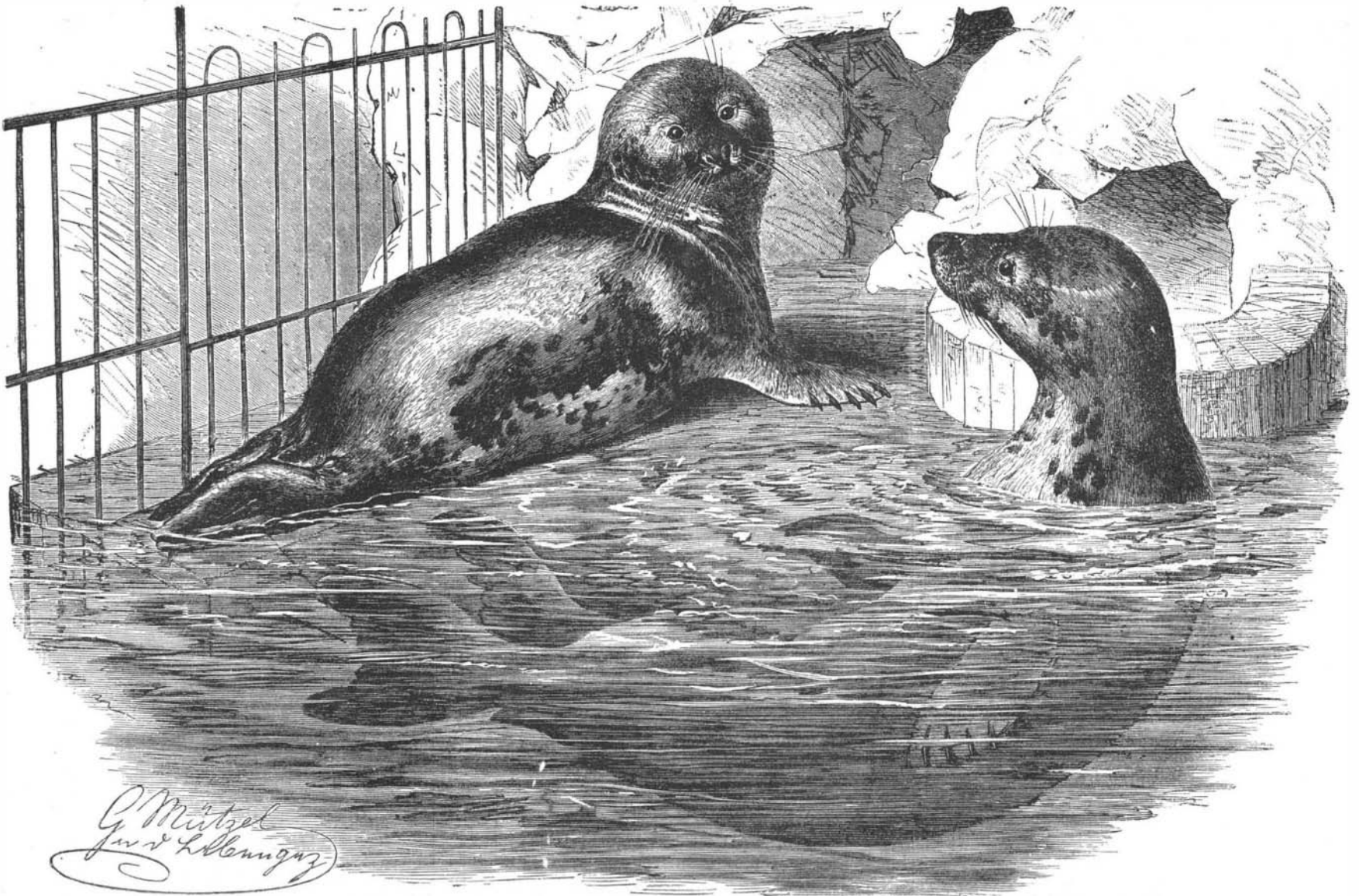
as the general public, forming, in fact, the chief point of interest in the garden. These two seals came from the Baltic Sea. They were caught near Dantzic by Gross-Plehnendorf, and were sold to the garden as common seals, or "sea dogs;" but there can be no doubt that they are two young gray seals. The gray seal (*Halichorus gryphus*) lives on the

coasts of the countries bordering the Baltic Sea, also on the shores of Great Britain, Norway, Iceland, New Caledonia, Labrador, and, perhaps, southern Greenland. They are specially abundant in parts of the Baltic Sea, but are not found in the most frigid regions. Young specimens of the gray seal may easily be mis-

taken for the common seal; but old ones, specially males, can be readily distinguished because of their great size. They attain a length of from 8 to 9 feet, and a weight of from 400 to 500 pounds; while the common seal is seldom more than 4 or 5 feet long, and weighs only from 100 to 150 pounds. To a connoisseur there are other points of distinction which are marked; for instance, the shape of the head, the teeth, and the coloring of the fur. In the gray seal the snout forms the largest part of the head, this feature becoming more marked as the animal grows older; but in the seals of the *Phoca* genus the brain is much larger.

The predominating color of the fur is gray—dark on the back and lighter on the belly—with many modifications, according to the age and sex of the creature.

The females are lighter in color than the males, and in older specimens the coloring is usually more uniform; that is, less mottled than in the young. With the latter a great number of dark spots are to be found scattered over the gray ground, specially on the neck and flanks, as shown in the accompanying cut. As they grow older, the spots gradually disappear. It is a notable fact that the gray seals, unlike most



THE TWO GRAY SEALS IN THE ZOOLOGICAL GARDEN IN BERLIN.