ARCHÆOLOGY

Statues Show Foot Troubles

Famous statues of ancient times are usually cited to show that foot troubles are a comparatively modern plague, which came into existence along with confining leather shoes. But realistic statues of the ancient world also show that the ancients developed shoe troubles and that their feet were affected.

A report in a recent number of the Antiquarian, an archæological journal, states that very early statues do show perfect feet. Egyptian sculptors carved feet with a straight inner edge, and with toes of natural shape. The same perfection of shape is true in early Assyrian sculptures. In the Greek statues of the archaic period, usually dated as from 580 to 520 B. C., the symmetrical shape of the toes is always noticeable. bronze Discus thrower, or Discobolus, of Myron of the early 5th century B. C. shows fine, well modelled, toes.

But beginning in the late 5th, and during the 4th century B. C., a deformity of the little toe begins to appear, the archæologist finds. the famous Hermes of Praxiteles, found at Olympia, shows the fifth or little toe pressed or crushed into the fourth toe. The typical foot for the next several centuries is a straight great toe, a rather wide gap between it and the second toe, and a deformed little, or fifth, toe.

The malformations mentioned, namely the gap between the great and second toes, and the deformed fifth toe are clearly due to the type of sandals, he says. The type generally worn had a single inter-toe thong that came up between the great and second toes, and a cross strap which prevented a natural expansion of the little toe. The statuary of the last three centuries B. C., and of the first two centuries A. D., are correctly realistic in their modelling, despite the fact that realism, if it extends to the reproduction of malformation, was and is considered unartistic.

Science News-Letter, November 13, 1926

HYGIENE

City Water Must Be Pure

Polluted city water has enabled a typhoid patient to collect damages from the city of Albany for permanent injury to his health. A \$3,000 verdict was awarded on the ground that the city contracts with each citizen to furnish unpolluted water and had failed to warn the people that such pollution existed.

Thirteen of the 200 cases that occurred in the same typhoid outbreak filed notice of suit within the required period and may also bring suit. If the decision is upheld by the higher court where the city intends to carry it the case will establish an important precedent.

Science News-Letter, November 13, 1926

Two Meteor Showers

(Continued from Page 105)

tion mark, with the brilliant Regulus at the bottom.

Actually, these meteors are moving in practically parallel paths through space, and the radiant, or point from which they seem to spread out, is simply an effect of perspective, as the rails of a long straight track seem to meet in the distance. Once a year the earth crosses the path of the meteors and shooting stars, which are simply meteors that are being burned up by the friction of the earth's air, then are particularly numerous. In the case of the Andromedes, the meteors are probably the remains of Biela's Comet, which, after several visits to the earth, mysteriously vanished.

The average height of meteors above the earth's surface is about 61 miles, so that they are by far the closest of all celestial phenomena. Though the earth's atmosphere extends up much higher than that, the meteors do not begin to glow until the earth's atmosphere is dense enough to cause friction. Meteors in general first appear at heights of about 76 miles and by the time they fall to a height of 51 miles they are burned up, but occasionally one lands on the earth. They move with an average speed of about twenty-seven miles a second, so it is a fortunate thing that we are surrounded by atmosphere or else the earth would be continually bombarded.

The accompanying maps show the stars as they appear this month, the great "Square of Pegasus," which is partly in Andromeda, being conspicuous in the south. Below it is Fomalhaut, in the Southern Fish, one of the most southerly stars visible from the United States. Low in the east the Twins, Castor and Pollux, can be seen, and nearby Orion, perhaps the most magnificent of all the constellations and which, in a few months, will be in a position where we can fully appreciate it.

Science News-Letter, November 13, 1926

Owners of vessels whose ships must traverse shallow water watch water level reports and take advantage of high water to load their ships to greater drafts.

(107)

NATURE RAMBLINGS

By Frank Thone



A November Voice

To most people there is nothing more suggestive of desolation and loneliness than the cry of the loon. Sounding through the chill dusk of a November evening, across the gray, cold surface of a lake that is sullenly waiting to be bound in ice, it is the very voice of the border-time between autumn and winter.

But from the bird's own point of view, the loon is a great success. Birds very much like them existed in Miocene geological times, something over a million years ago; and a survival with little modification for so long a time as that is in itself a strong argument of a good design to begin with. Latterly the loon has had to face the activities of the most destructive of all predatory animals, man, and it has survived even this terrific test far better than have most of its web-footed kindred.

One reason for this very considerable success is the superiority of the loon as a submarine mechanism. It can dive so quickly that the legend has arisen of its ability to see the flash of a hunter's gun and submerge before the shot can reach it. It can, at the other extreme, submerge so gradually that it does not betray itself by the slightest splash or ripple, and it can swim under water indefinitely with only the tip of its beak at the surface for air. Sometimes it sticks up its head like the top of a periscope for a look around, and then pops under again, to reappear dozens of yards away in a few seconds. It is one of the flying birds that also uses its wings under water for oars, and can thus attain an almost penguin-like speed swimming submerged.

Science News-Letter, November 13, 1926

The Navy is to have an experimental airship built entirely of metal.

The house in Berlin where Koch discovered the tuberculosis bacillus has been marked by a tablet.

The Argentine government is organizing an expedition to explore the Antarctic and South Polar regions.