THE IBIS. BY PROF. CHARLES F. HOLDER.

The spectacle of the ibis so thoroughly at home in a pool within the corporate limits of Los Angeles, Southern California, is suggestive of the mild winters of that region, as these birds, as a rule, are confined to the tropics or their immediate vicinity. The birds shown here were introduced some

years ago, and soon became perfectly domesticated, living among the great clumps of tule, apparently perfectly contented.

This is the glossy ibis, found in tropical regions and in Mexico; and while it is an attractive and graceful creature, it has not the beauty of color possessed by the scarlet ibis of South America, which Audubon believed he saw in Louisiana, but which has never been observed there since. The glossy ibis is common in Mexico in summer, retreating to more congenial climes in winter; yet as suggested, the winters of Southern California apparently do not trouble the birds shown in the illustration.

The color of this species varies with age, this being so marked that different names have been given the different birds, as glossy ibis, green and gray ibis. There is no difference in plumage between male and female. The latter is a lit-

tle smaller than the male. In the adult bird a dark chocolate hue pervades the neck, head, and part of the back, while the wing coverts are darker and dashed with green ; the tail is glossed with purple and green. The beak is dark brown with a touch of purple, and around its base, including the eye, is a naked space that gives the impression of a face. This is colored a grayish green ; the legs and feet are also of this color. The bird is about two feet in length, and its position in the water or as it stands among the tules is at once

dignified and graceful, well shown in the accompanying illustration. The young lacks the glossy sheen which characterizes the adult, and is more mottled.

The so-called sacred ibis, and the fact that it figures extensively in the literature and religion of the ancient Egyptians, has given the group more than ordinary interest. The sacred species is Ibis æthiopica, a striking bird, being pure white, the disconnected barbs ot its plumes a purple black. The head and neck are naked, the latter being black. Travelers on the Nile always have the sacred ibis pointed out by those who "personally conduct," but the bird seen is the buff-backed ibis, the real sacred ibis having long ago disappear ed from the Lower Nile, confined now to the region south of Khartoum. There is very good reason to believe that the sacred ibis never was found in Egypt or Nubia except in the case of a few individuals, the vast numbers in the tombs being explained on the theory that the Egyptians imported them. The buff-backed species is very.common, and was formerly, more than at present, employed as a scavenger, and pro-

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tected in Alexandria. Dr. A. H. Adams writes: "Every street in Alexandria is full of them. In certain respects they are useful; in others troublesome. They are useful because they pick up all sorts of small animals and the offal thrown out of the butchers' and cooks' shops. They are troublesome because they devour everything; and dirty, and with difficulty prevented from pollutHermopolis was the patron city of the ibis, and it was imported into Italy in early times and kept at the temples of Isis, the emblem of Thoth, the secretary of Osiris, and supposed to record the deeds of the dead, thus explaining the presence of its figure upon so many monuments.

To see the bird to-day it would be necessary to go

far into tropical Africa. It nests near Khartoum in September, according to Dr. Vierthaler, forming the nests in the mimosa trees which are surrounded by marshes. As many as thirty nests, constructed of course with twigs and lined with feathers and fine twigs, have been counted in a single tree. Three, sometimes four greenish white eggs are laid, about the size of those of a duck. The birds from long exemption from interference pay little or no attention to the natives, moving about among them and near their flocks without fear; but they avoid the white man and lead him a long and generally fruitless chase.

A PORTABLE SEARCH-LIGHT FOR FIRE DE-PARTMENT USE.

The search-light has been found of the greatest possible use in navigation. in warfare and for spectacular purposes. It has never before, we believe, until now been pressed into ser-

ing in every way what is clean, and what is not given to them." The birds apparently are protected, as are the buzzards in Charleston; those roosting about the market place do not add materially to the cheerfulness of the surroundings though they are of undoubted value, and in some towns evidently cheaper than a system of sewers. Thousands of mummified birds are found in Egypt and the bird frequently figures in the sculpturing of this country, and evidently for some reason made a strong impression upon the people. vice as a means for saving life. Our engraving represents a new portable search-light which the New York Fire Department has had installed as a part of the equipment of Engine Company No. 20, on Marion Street, in the heart of the drygoods district. At first sight the apparatus resembles the ordinary fire engine, and, in fact, it was built by the La France Fire Engine Company, of Elmira, N. Y. It is intended for use at fires at night, or where the smoke is very dense. as the light penetrates the smoke easily and enables the fire-

men to save life and put out the flames much better than with lanterns.

The boiler is of upright tubular pattern and drives a Forbes upright engine with 5×5 cylinders, which at a pressure of 100 pounds makes 600 revolutions per minute. There is an independent Blake duplex feed pump, and there is a 10-gallon feed tank. The engine is direct-connected to a Bullock ironclad multipolar marine type generator, and the current is furnished at a pressure of 80 volts, each light taking 35 amperes of current. There is a flywheel between the engine and the generator to assist in making the motion regular. There are two searchlights of the Rushmore marine pattern, of 6,000 candle power each, the barrels being 18 inches in diameter. They are carried on each side of the driver's seat. The usual means are provided for turning them at any angle, and special care is taken to provide means whereby the vibration is taken up. The search-lights can be removed from the pins which secure them at the front of the apparatus, and they may be placed on portable standards which are carried at the rear of





NEW YORK'S LATEST FIRE FIGHTER—THE PORTABLE SEARCH-LIGHT PLANT AT WORK.