the bottom plate of the burner. When this cord is pulled Within the Austro-Hungarian vestibule were displayed sevthe sliding tube, A, is raised, and the cap, C, swings over it, instantly extinguishing the flame.

cleaning, and is easily replaced, being complete in itself and not attached to the burner.

For hanging and other lamps placed too high to be easily reached, this invention is valuable, as it only requires a pull of the cord to extinguish the light. Further particulars may be obtained by addressing the inventor, P. O. Box 2326, New York city.

# A Marble Boring Sponge.

In 1871, a vessel laden with a cargo of Carrara marble was wrecked off the south coast of Long Island. This year some of the marble having been raised was found to be perfectly honeycombed by some marine boring animal. A fragment of the marble was exhibited at a recent meeting of the New York Academy of Sciences, and the opinion expressed by one of the members that the work of destruction was probably due to a species of Pholas. Dr. Newberry, however, was inclined to believe that it was due rather to the ravages of a species of sponge of the genus Cliona, and this view has been recently indorsed in a note on the subject published by Professor A. E. Verrill, who has had an opportunity of examining some specimens sent to the Peabody Museum of Yale College. Professor Verrill states that the exposed portions of the slabs examined by him are thoroughly penetrated to the depth of one or two inches by the crooked and irregular borings or galleries of the sponge, Cliona sulphurea, so as to reduce them to a complete honeycomb, readily crumbling in the fingers. The marble is perfectly sound and unaltered beyond the borings. He says that the rapid destruction of the shells of oysters, etc., by the borings of this sponge has long been familiar to him, but he has never before seen examples of its effects on marble or limestone; for calcareous rocks do not occur along those portions of our coast inhabited by the animal. He suggests that its ability to rapidly destroy such rocks might have a practical bearing in case of submarine structures of limestone or other similar materials.

# PARIS EXHIBITION.-FACADE OF AUSTRIA AND HUNGARY.

The façade of Austria and Hungary is simple in appearance, but it lacks neither grandeur nor elegance. Its architect had in view not only the Austrian and Hungarian architecture, but also the vestibule of a palace of fine arts. In reality these two pavilions are devoted to art; the one on the south includes the bureau of the Austrian Commission, the one on the north the bureau of the Hungarian Commission. These buildings are of cut stone, and each has above and below three windows. They are very plain on the first and second floors, and appear to have no roofs, but are crowned with a balustrade of stone.

The colonnade that unites the two pavilions forms a portico of nine arches, the abutments of which are each supported by an entablature, supported by two columns of white stone. The ornamentation of this building consists of festoons and allegorical figures painted in black upon a white ground; the attic that crowns the frieze is equally ornamental.

Above the portico there are statues of art, science, history, etc. At one end of the colonnade floats the flag of Austria; at the opposite extremity the staff bears the flag of Hungary.

eral statues, among which are Michael Angelo, Beethoven, and Albert Dürer, and beyond there were plans of existing The device is readily removed from the lamp burner for monuments and important buildings in Austria and Hungary.

### THE COMMON JACANA.

This bird is a native of Southern America, and there are other species scattered over Africa, Asia, and Australia. Mr. Gould tells us that the Australian species is a good



#### JACANA.

diver, but a bad flier. "Their powers of diving and remaining under water are equal to those of any bird I have ever met with; on the other hand, the powers of flight are very weak. They will, however, mount up fifteen or twenty yards and fly from one end of the lake to the other, a distance of half or three quarters of a mile; but generally they merely rise above the surface of the water and fly off for about a hundred yards. During flight their long legs are thrown out horizontally to their full length. While feeding they utter a slowly repeated 'cluck, cluck.' The stomach is extremely muscular, and the food consists of aquatic insects and some kind of vegetable matter."

slight greenish gloss, taking a rusty red tinting on the back of the wing coverts. The primary quill feathers of the wing are green, and the wings are furnished at the bend with long sharp claws. In the African species these spurs are hardly perceptible. At the base of the beak is a curious leathery appendage, rising upon the forehead above and depending toward the chin below. The claws are all very long, especially that of the hind toe, which is nearly straight and longer than the toe from which it proceeds. We take our engraving from Wood's "Natural History."

## Natural History.-The Cope Collection.

When E. D. Cope, the Philadelphia naturalist, bought the Argentine Confederation's collection of fossil bones at the Paris Exhibition, he bore away a prize in the face of a powerful competition. Russia wanted them, or the best part of them; a Vienna scientific institution wanted them; Belgium wanted them, and Paris herself had set her heart on them, intending to place them in the Jardin des Plantes. In the face of all opposition, says the Philadelphia Times, a Philadelphian secured the lot, and careful hands have securely packed them in boxes preparatory to sending them to America, where they are expected some time this month. These fossils are peculiarly valuable to this country for the reason that the chief portion of them are not be found anywhere in the United States, and there are some specimens the like of which no country in Europe can show. They are a sort of connecting link to collections which America already has. The locality from which they come, Patagonia, is regarded as entitled to rank first in the chain or series of specimens which has been dug up in Ecuador, in the valley of Mexico and in the Western and Middle States. In Phœnixville, several years ago, fossil remains were found similar to those discovered in the Western States, Mexico, and South America. These specimens coming from Patagonia, the southern extremity of the western hemisphere. and bearing such a resemblance to those found in North America, have a value which naturalists, knowing and understanding the relations which one collection bears to another, alone can fully appreciate. The collection includes about one hundred different specimens of animals. The perfect state in which some of the remains are preserved gives them an increased value. There are nineteen skeletons. chiefly of large animals, almost completely whole. The species most numerously represented in the collection are the armadillo and sloth. Among the armadillos there are several kinds of skeletons, pronounced by Mr. Cope entirely new to science. One of these is an immense specimen with a curious sort of tail. It increases in size toward the end, at which point it takes an oval shape and is from a foot to 18 inches wide. Unlike that of all other known kinds of armadillo, the tail is without joints-except one at the base, which enabled it to be swung about-and is incased in a hard, shell like box, as hard as the back of a turtle. The tail is supposed to have been, in the lifetime of the animal, its chief weapon of attack or defense. At intervals on the hard, oval surface at the end holes are found, which are supposed to have contained short protuberances, or horns, giving the beast a weapon like a spiked club. Swung with all the strength which an animal as big as the largest elephant of modern times could muster, this armadillo's tail is believed by scientific men to have been more formidable than

The general color of the common jacana is black, with a are now the jaws or claws of a lion or tiger. Another rare



© 1878 SCIENTIFIC AMERICAN, INC.

# PARIS EXHIBITION.-FACADE OF AUSTRIA AND HUNGARY.