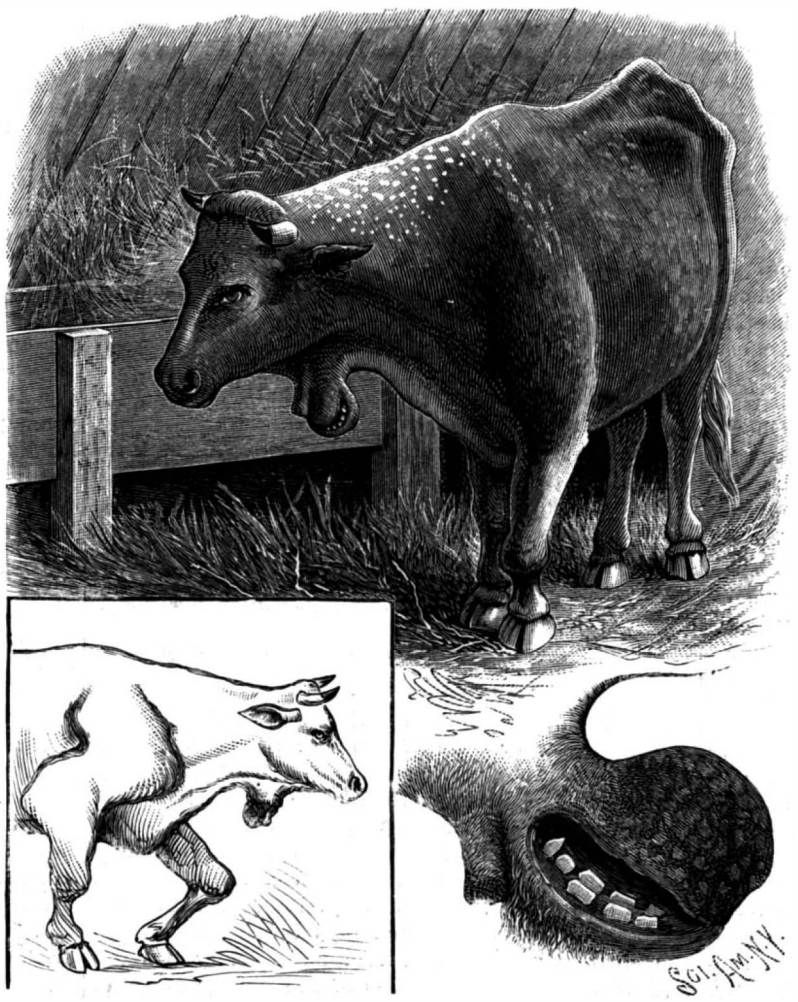
A BULL WITH TWO MOUTHS.

A New York City butcher recently came into possession of the remarkable animal shown in our illustration, being a full-grown bull with two distinct mouths. The mouth proper of the animal is used solely for eating, while the other organ is used only for drinking. The bull is about eighteen months old, weighs 1,200 pounds, and is dappled gray in color, the animal, with the exception of one shoulder and the forelegs, being well formed. The regular mouth is of normal size and contains two full sets of teeth, but no liquid ever passes between them. The other mouth, of which an enlarged view is given at the bottom of the picture, is about five inches in diameter, at the end of a protuberance three inches thick, and is situated directly under the neck, about half way between the head and shoulders. There are neither eyes nor ears in connection with this mouth, but there are nostrils, through which the animal breathes as well as through his other nostrils, and a partial set of teeth, although this mouth is only used for drinking. The animal also has double knee and hoof joints. His disposition is said to be quiet and gentle.



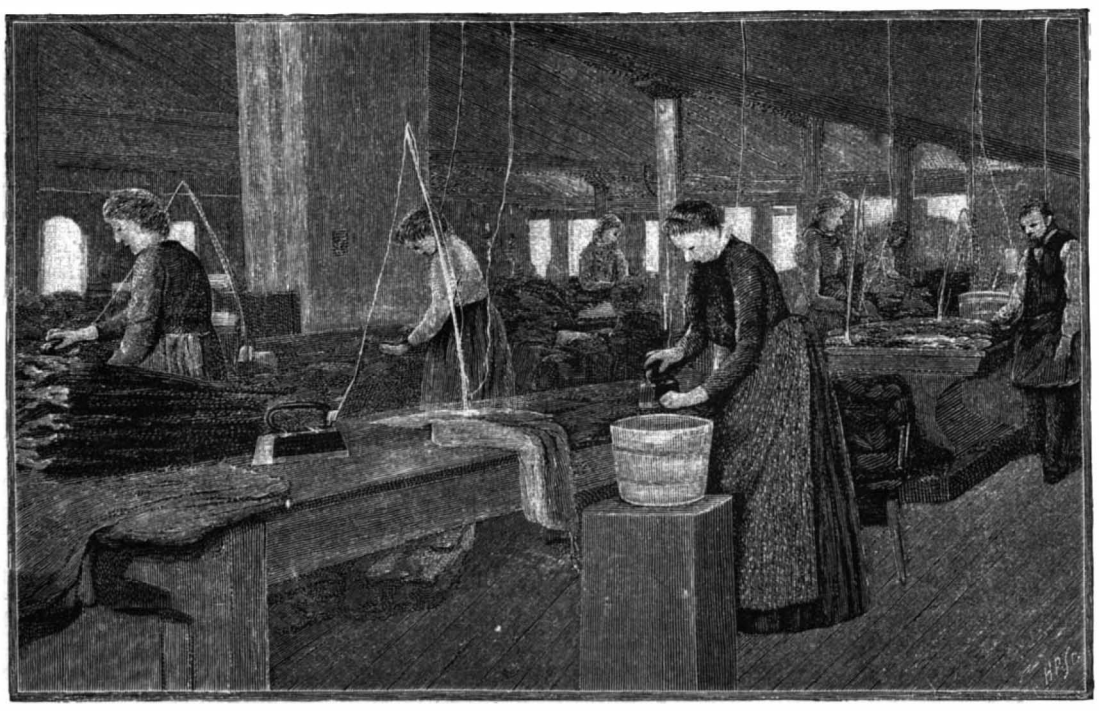
A BULL WITH TWO MOUTHS.

Tinning of Steel.

The tinning of hard steel is advocated by a writer in one of the English mechanical papers, on the ground that a bath of melted tin will not injure the temper or materially soften hardened steel surfaces, the fact being that tin melts at 442 degrees and polished steel acquires straw color at 460 degrees F. In carrying out this process the iron or steel article is first freed from scale by means of a pickle of dilute sulphuric acid and the scratch brush or sand; or, if the articles are of steel and have been quenched or hardened in oil, every trace of this is first removed by immersion in a boiling soda lye and the surface made chemically clean; even the film of oxide due to a pale straw color will prevent the perfect adherence of the tin to the steel. The bath consists of one part hydrochloric acid to about twenty parts of water; in this the article is held for a few seconds by means of a pair of brazing tongs, then withdrawn, and, while still wet, immersed instantly in a ladleful of melted tin, the surface of this being kept from oxidizing by a flush of good, clean tallow. Care is necessary not to overheat the tin beyond the proper melting temperature, and in less than half a minute the article, when withdrawn, is found completely tinned.

ELECTRICALLY HEATED SAD IRONS.

The applications of electricity to the uses of the arts are augmenting with surprising rapidity, and many of these applications are of an ingenious and interesting nature. One of the latest electrical improvements is the heating of pressing irons, which has been introduced in the clothing factory of F. P. Seavey & Co., Minneapolis, and which we illustrate from a photo plate given in the *Western Electrician*. The general method of conducting the electricity into the pressing iron is seen in the foreground of our picture. A spring rod stands upon each table, and to this rod the electrical wires are connected, running thence into the pressing iron as shown. The electrical current is made to pass through a zigzag wire resistance composed of a large amount of wire, which is so arranged within the pressing iron as not to come in contact with any portion of the shell of the iron. The resistance wire is raised to incandescence by the electrical current, and the caloric thus generated heats the pressing iron to the required degree. The interior of the pressing iron contains what is termed a compressing plate, and this, with other devices, constitutes such an arrangement of parts that the electrical resistance increases with an increase of temperature, and the apparatus is made self-regulating, so far as temperature is concerned. When the working parts are cold, the resistance cannot become much heated until the compressing plate becomes hot, which reacts upon the resistance, raising its temperature, which in turn increases its resistance and checks the flow of current. The plant was installed by the Carpenter-Nevens Electro-Heating Company, of Minneapolis. C. E. Carpenter is the inventor of the irons which are used in the factory. In addition to pressing irons, the invention is applied to a number of household appliances.



ELECTRICALLY HEATED SAD IRONS.

It has heretofore been thought by practical electrical engineers and others that electric heating could not be economical with the present method of producing current. While there is twice as much heat in gas and other means of heating as electricity, the electric heater is still economical, from the fact that, if properly constructed, all of the electrical energy supplied to such apparatus can be used in doing useful work, while with gas, for example, this is not the case. This fact will be appreciated in considering the great loss in the heating of such utensils as sad irons. For example, in laundries where gas is quite generally used for this purpose two irons are used with one operator. The surface of these irons is radiating heat, the one losing heat for this reason while being heated, and the other losing heat from the top and sides, principally by radiation while in use, and by conduction in evaporating moisture in the material ironed. It will be seen, therefore, that there are two radiations and one conduction, or three losses, which in ordinary practice are nearly equal. In the electric iron, where the top and sides of the iron do not become heated, two of these losses have been eliminated, a result which makes it more economical. The same fact may be stated regarding the use of soldering irons, especially where the heat is confined to the point of the iron.

Great saving is also found in the use of the electric current for baking griddle cakes, the electric iron consisting of a very thin plate, under which the heat is distributed almost perfectly and equally. It very quickly heats the surface plate when required for use.

The Egyptian Lions, British Museum.

Dr. Rüppell was the first who made us acquainted with the two lions in red granite which, at the time of his journey in Nubia, were lying among the ruins of the temples at Mount Barkal, near the isle of Meroë. That traveler stated that when he saw the lions, one of them was broken to pieces, and that the line of hieroglyphics which was on the base of the other could no longer be deciphered. Lord Prudhoe, who instantly perceived the value of these monuments, drew them from the ruins in which they lay buried, and carried them to England. There, after having all the fragments put together by skillful hands, this zealous patron of art and science, to whom the study of Egyptian antiquities in particular is deeply indebted, presented to the British Museum the two monuments perfectly restored, and constituting the most beautiful and noble specimens of Egyptian art. In going through the vast galleries of the British Museum, in which the masterpieces of Greek and Roman sculpture attract our eyes on all sides, and still serve as models to young artists desirous to find out the secrets by which the great masters of ancient art have rendered their productions immortal, we are everywhere carried away with admiration, particularly when, on entering the great hall of the marbles of the Parthenon, we find ourselves at once carried back to the age of Pericles, at which time the arts of Greece had reached their perfection. But these impressions, though augmented by the good taste which has arranged all the objects, will not prevent the visitor from stopping with reverential awe before the two lions of red granite which guard on each side the entrance to the grand gallery containing the colossal monuments of ancient Egypt, couched on their pedestals, the one lying on his right, the other on his left side, with their heads turned toward the spectator; they seemed more like petrified animals than the work of a sculptor. I do not believe that there exists in any European museum any monument so likely to change the opinion of those who see nothing in Egyptian art but a servile and tasteless imitation of forms consecrated by religion in the infancy of art and civilization, and who ascribe to the influence of the Greeks whatever traces of an elevated style are to be found in Egyptian monuments. It was this prejudice which led M. Rüppell to conclude, while he stood in the midst of the finest remains of the times of the Pharaohs, that these lions must have been sculptured under the influence of the Greeks. But if the royal names inscribed on their breasts seem to approach the age of Psammetichus, there are still inscriptions enough on the bases of the two monuments to prove to us that they ascend at least to the seventeenth century before our era, and that we certainly admire in them productions of the best epoch of ancient Egyptian sculpture, monuments which have resisted the ravages of more than five and thirty centuries.
—*C. Leemans.*

THE largest grain elevator in the world was built at Minneapolis Junction in 1886. The building is 336 feet long, 92 feet wide, and 175 feet high. It has storage capacity for 2,000,000 bushels of grain within its walls. During its construction the carpenters and joiners used over 6,500,000 feet of lumber of all kinds, besides thirty-two car loads of nails, which, if packed, would make the enormous amount of 10,000 common kegs; the best calculators say that the actual number of nails used in the mighty building will fall but few, if any, under 20,000,000. The engine used is capable of handling 175,000 to 200,000 bushels of grain per day, or enough during the year to equal the combined products of the State of Minnesota and the two Dakotas. Two hundred and fifty cars have often been loaded at this elevator in ten hours.

TO make paint stick to bright metal tin roofs, sand paper the metal.