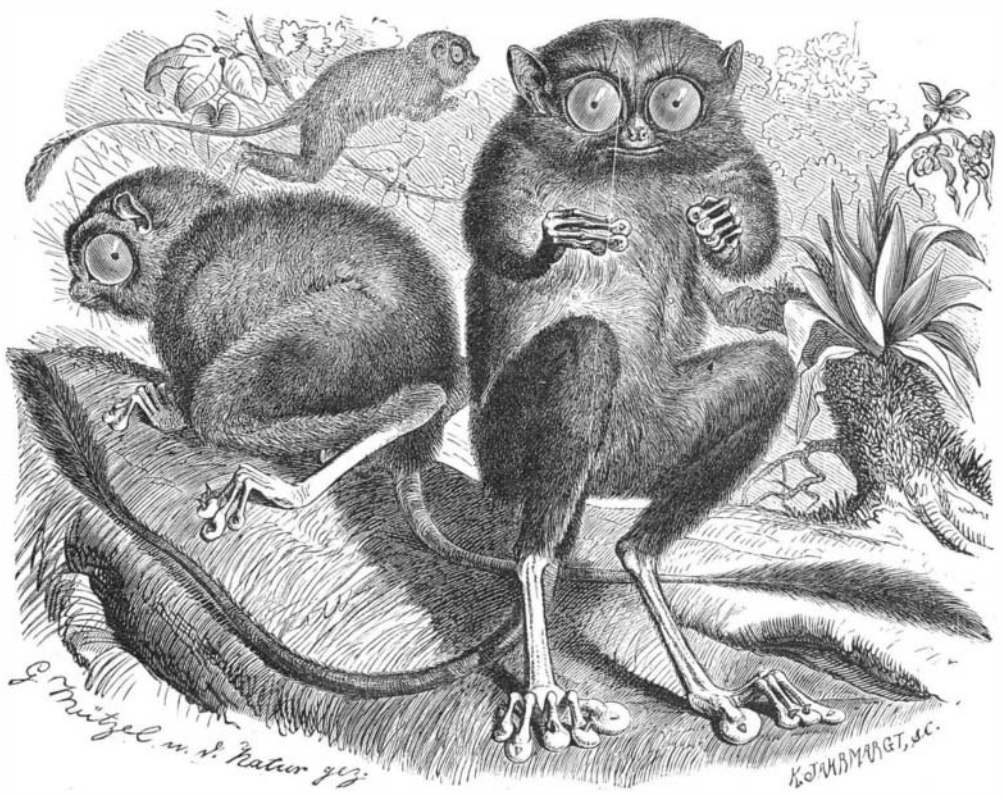
THE TARSIER.

This curious little creature is a native of Borneo, Celebes, the Philippine Islands, and Banca. From the latter locality it is sometimes called the Banca tarsier. It is also known as the podji. The color of the tarsier is a grayish brown, with a slight olive tint washed over the body. A stripe of deeper color surrounds the back of the head, and the face and forehead are of a warmer brown than the body and limbs. The hands are of extraordinary length in proportion to the size of the creature. This peculiarity is caused by a considerable elongation of the bones composing the "tarsus," or back of the hands and feet, and has earned for the animal the title of tarsier. The fingers and toes have at their extremities, upon their under surfaces, convex pads, and at the top short triangular nails or claws. Its eyes are of extraordinary size and very convex. It is a tree-inhabiting animal, and skips among the branches with little quick leaps that have been likened to the hopping of a frog.



TARSIER.—(*Tarsius Spectrum.*)

Fusing Metals without Fire.

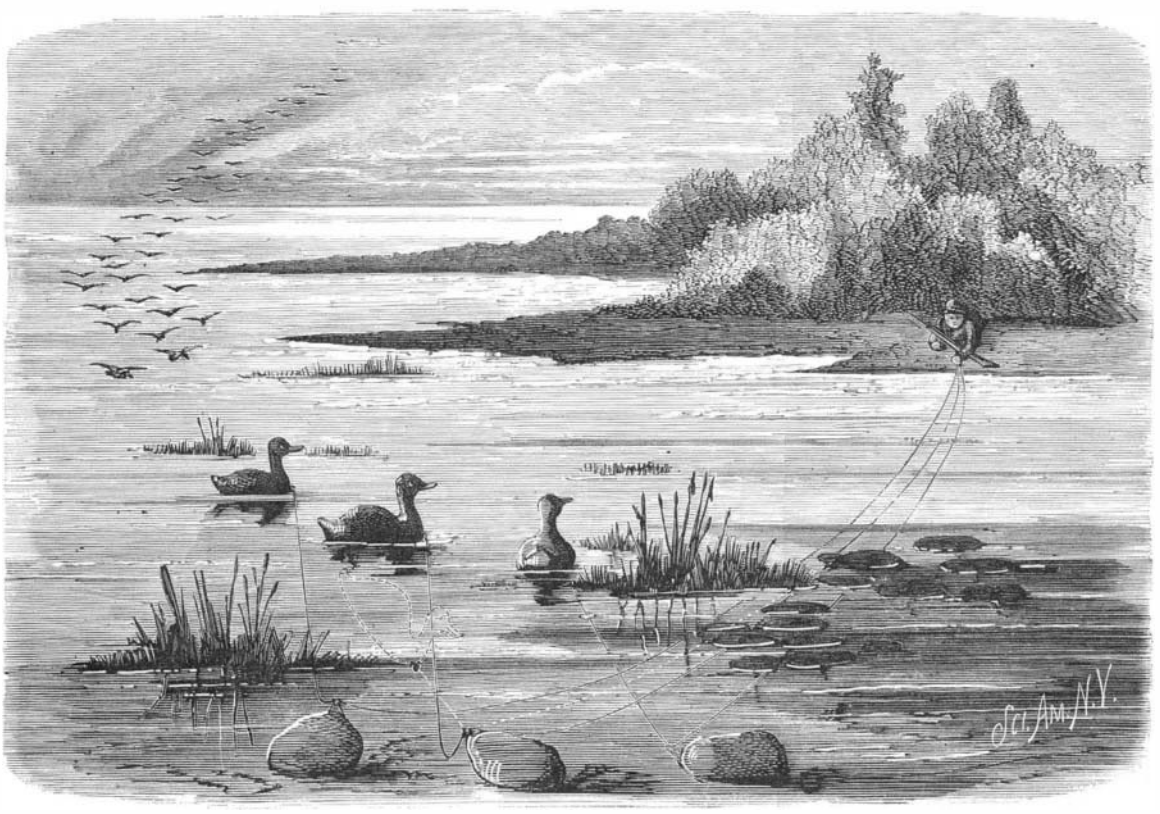
Jacob Reese, of Pittsburg, Pa., puts forth some remarkable claims in regard to an alleged new discovery in metallurgy. He says he is able to melt instantly a bar of cast steel one inch in diameter—which cannot be fused in less than five minutes in the highest furnace heat attainable—simply by throwing against it a column of air having a velocity of 25,000 feet a minute. The instant the air touches the metal fusion takes place. He says further:

"By furnace heat it requires many hours, and sometimes many days, to anneal metals. By a recent discovery which I have made, I can anneal bars of iron or steel at the rate of one foot per second, thus increasing the ductility of the metal 100 per cent, without the use of other fuel than that contained in the metal itself. I simply unlock the occluded (latent) heat. It becomes sensible and enlarges the metal, and by the method of doing this the enlargement is made permanent, that is, it does not contract to its original limit.

"Now, annealing and fusing iron and steel in one second of time may seem absurd, but it is nevertheless a fact, and reduced to practical utility in the arts."

DECOYS FOR WILD FOWL.

The annexed engraving represents a novel decoy for wild fowl, recently patented by Mr. Edmond Redmond, of Rochester, N. Y. The inventor applies a cord to the common decoy, and runs it through an eye or pulley attached to the sand filled bags in the bottom of the stream, thence to the shore, where the sportsman, by dexterously pulling the cords, causes the decoys to move and dive in the water like living birds. In running water, or where the wind prevails, the decoy may be allowed to move with the current or by the action of the wind, and may be drawn back by the cord.



REDMOND'S DECOY FOR WILD FOWL.

Some Ancient Monsters.

Recently Professor Cope, of Philadelphia, gave to the San Francisco Academy of Science a description of two lately discovered fossil animals. One was an enormous vertebrate, somewhat resembling an aquatic kangaroo, named the *Camarasaurus supremus*, whose neck was 9 feet in diameter, whose hind legs were 20 feet long, whose spinal vertebræ were 56 inches across, and which must have been 72 feet long by measurements carefully taken. This animal could walk in forty feet of water and catch its prey with its fore paws. He also described another similar monster whose spinal vertebræ were 6 feet across and whose hind legs were 40 feet long, with carnivorous teeth placed in the upper and lower jaws like shears, so as to cut up animal food by traversing each other in the most perfect manner. The bones of the lower half of this animal were solid and very heavy, to keep its feet down in the water, while bones in the upper half of its body were built in honeycombed layers as thick as pasteboard, strong, but very light and buoyant in water. This monster has been named *Amphicælias fragilissimus*, and must have been considerably over 100 feet in length. Both animals have large and powerful tails like kangaroos, and when catching their food in the water must have appeared as if on three-legged stools, the tail acting as an equal support of the tripod.

Bees Gathering Honey from the Catalpa.

At a recent meeting of the Philadelphia Academy of Natural Sciences, I called attention to the fact that there existed large patches of nectariferous glands on the under side of the leaves, in the axils of the veins, of *Catalpa bignonoides*. Up to the present time the proof that the glands in question were nectariferous rested only on the evidence of the taste of the secreted fluid and the presence of ants of both red and black species, apparently feasting upon the nectar. Since then I have found the common honey bee gathering the nectar from the foliar glands with as much industry as from the flowers, the latter of which at the time the observation was made having fallen, so that there was positive evidence that the glands alone attracted the bees. Furthermore, the bees were seen to introduce their tongues into the axils of the leaves where the secretion was present in a visible quantity on the gland, and lap it up as when getting the nectar from flowers. The bees engaged at this work carried no pollen at the time, and were apparently devoted to getting the honey only.

These observations place the question of the saccharine nature of the secretion beyond any doubt, and make it probable that the catalpa is valuable as a honey plant, and deserves a place in lawns, parks, and pleasure grounds, on account not only of its beauty, but also from its economic value to the bee culturist.—*John A. Ryder.*

SOME RECENT AMERICAN PATENTS.

An improved envelope has been patented by Mr. Solon P. Cady, of Peterborough, N. Y. It consists in an envelope having a short slit cut in its face in such position that when a stamp is placed on the envelope the slit will be adjacent to one edge of the stamp, whereby a proper tool may be inserted in the slit beneath the stamp and the contents of the envelope protected while the stamp is being punched.

An improvement in roasting ovens has been patented by Mr. Henry C. Atkinson, of Franklin, Ky. The object of this invention is to provide an oven to be placed on the outside of a stove or range, for cooking purposes. The oven is a removable one, and is to be set on the collar of a cooking stove or range.

An improvement in carboy trunnions has been patented by Mr. Samuel M. Holton, of Battle Creek, Mich. The object of this invention is to provide a device by which a carboy can be tipped and its contents poured out easily and without danger or inconvenience to the operator.

Mr. Jesse E. Nale, of Merchantville, N. J., has patented an improved pump, which is so constructed that the water contained in the pump barrel may be allowed to flow out, so that it cannot freeze in the barrel and injure the pump or prevent its working.

Mr. William Sias, of West Claremont, N. H., has invented an improved washing machine, in which the action is similar to hand washing; the dirt settles at the bottom, and will not be rubbed again in the clothes after being washed out.

An improvement in mowing machines has been patented by Mr. John H. Green, of Londonderry, Ohio. The object of this invention is to improve the construction of harvesters and mowers in such a way that, should the driver leave, fall, or be thrown from his seat, the cutters will be thrown out of gear and the cutter bar released, so that it will turn around parallel with the line of draught, if the machine should be drawn forward, to prevent the driver from being killed or injured should he fall in front of the cutter bar, and render the machine less liable to receive or inflict injury should the team run away.

Mr. George R. Huff, of Tomah, Wis., has patented an improved device for filing saws, which is so constructed that any one, even without practice or skill, will be able to file a saw true and accurate. The invention consists in a sliding block, having a longitudinal dovetailed groove in its lower side to receive the saw, and one straight and two inclined cross grooves in its upper side, for guiding the file and file holder.

Concerning the Memory.

The *Medical Press and Circular* gives some entertaining statistics of memory, from M. Delaunay. The inferior races of mankind, such as negroes, the Chinese, etc., have more memory than those of a higher type of civilization. Primitive races which were unacquainted with the art of writing had a wonderful memory, and were for ages in the habit of handing down from one generation to another hymns as voluminous as the Bible. Prompters and professors of declamation know that women have more memory than men. French women will learn a foreign language quicker than their husbands. Youths have more memory than adults. It is well developed in children, attains its maximum about the fourteenth or fifteenth year, and then decreases. Feeble individuals of a lymphatic temperament have more memory than the strong. Students who obtain the prize for memory and recitation chiefly belong to the former class. Parisian students have also less memory than those who come from the provinces. At the *Ecole Normale* and other schools the