

CLEANING ALABASTER.—A correspondent, in reply to a question in the *English Mechanic*, says: I brought some tazzas from Italy ten years ago, and inquired of the vendors how they were to be cleaned. I was told with cold water and a hard brush. They have never been cleaned any other way, and are as good as the day I bought them. Soap is utter ruin to alabaster as far as my experience goes.—DELTA.

CARVER'S SQUEEZING WAX.—This preparation is used for obtaining the exact patterns of carvings, and to give the workman a clearer idea of projections or depths than a drawing would do, unless a considerable time were expended upon it. In cases where it is required to match furniture which is at a distance, and cannot be removed, the wax can be applied without injury to the carving, and can be made from either of the following:—Suet, 1 part; beeswax, 2 parts. Wax, 5 parts; olive oil, 1 part. Wax, 4 parts; common turpentine, 1 part. The parts only need be melted together, and allowed to cool; the wax is then fit for use. It should be well pressed into the carving. Sometimes it is only possible to take the front or side of an object at a time, as it must be drawn off in the form of a mould. The sections, when ready, should be filled with plaster of Paris and water, made into a thick paste, and allowed to set. The mould is then removed, and the plaster cast is ready to work from.

MONSTROSITY IN THE HORSE.—A correspondent writes to us (*Letter*) to the effect that he has recently seen on the Boulevards at Paris a horse with eight feet, the four extra feet growing out of the fetlocks of the horse. The case, we presume, is one of supernumerary digits, and is an instance of reversion. On the evolutionary theory, the horse is derived from some quadruped which possessed five complete digits on each foot, and the successive stages have been better followed out, and lend more support to the theory of evolution, than is the case with any other animal. The remains of horses almost identical with those now existing are found in the Quaternary and later Tertiary strata as far back as the Pliocene formation. But in the deposits of the earlier Pliocene and later Miocene period the bones of an animal—the hipparion—are found in which the two splint horns representing the first and third metacarpal and metatarsals of the horse are as long as the central bone, and to each of them a small three-jointed digit is attached. In still older deposits belonging to the earlier Miocene and later Eocene period, a distinctly three-toed animal—the anchitherium—existed; and at about the same period, or before, one—the mesohippus—with three toes and a splint-like rudiment of the fourth to the fore-limb, and three toes to the hind-leg. Lastly, in the orhippus, the oldest member of the equine species, there are four complete toes on the fore-limb, and three on the hind. Our correspondent does not state the position of the supernumerary digit.

HINTS ABOUT GLUE.—Good glue should be a light brown colour, semi-transparent, and free from waves or cloudy lines. Glue loses much of its strength by frequent re-melting; therefore, glue which is newly made is preferable to that which has been re-boiled. The hotter the glue the more force it will exert in keeping the joined parts glued together. In all large and long joints it should be applied immediately after boiling. Apply pressure until it is set or hardened.

CEMENT FOR BELTING.—A simple prescription is to dissolve gutta-percha in bi-sulphid of carbon to the consistency of molasses. Slice down and thin the ends to be united, warm the parts, and apply the cement; then hammer lightly on a smooth anvil, or submit the parts to a heavy pressure. This is thoroughly water-proof.

UPHOLSTERING OLD CANE CHAIRS.—When the cane seat of a chair is broken, it may be made as good as new, or better, by unholstering it at home, as described by a contemporary. After removing the superfluous bits of cane, cover the space with matting formed of 3-inch wide canvas belting woven together. Tack it temporarily in places. After placing over this some coarse muslin, draw both smooth, and secure at the edge with twine, making use of the perforations. Remove the tacks, turn the raw edge over toward the center, and baste it down. Arrange the hair and wool, or whatever you propose to use for stuffing, and keep it in position by basting over it a piece of muslin; then carefully fit the rep, pin it in different places until you are certain it is in perfect shape, and tack it permanently, following, of course, the tracing made for the cane. Cover the edge with fringe to match the rep, using tiny ornamental tacks, and tie with an upholsterer's needle in as many places as is desirable, leaving a button on the upper side. When the back of the chair is to be repaired, a facing must be tacked on the outside.

CURLING OSTRICH PLUMES.—A correspondent of the *Inter-Ocean* says: If possible, an old plume should be used to practice on until one gets her "hand in," as two or three broken feathers in a nice plume might spoil it. With the left thumb and forefinger hold that part of the quill to which the feathers being curled are attached, and with a rather dull but pointed penknife take up the slender feathers, one at a time, beginning the base of the plume and working toward the point. The pointed blade will enable one to pick up the feathers readily: then, with a quick movement, acquired only by practice, the blade and thumb between which the feather is held are to be drawn to and off the end of the feather, when it will curl back toward the quill, more or less according to how tightly it was held while being drawn between the thumb and knife. If it is only desired to curl the tip end, as in long plumes, it is best to hold part of the way down the vane, instead of holding the quill. Patient practice will enable one to curl plumes nicely within a reasonable time, and their added beauty will repay the trouble.

HOW TO MAKE PAPER TRANSPARENT FOR PHOTO-CHROMOS.—Allow the photograph to remain in water until thoroughly soaked, then place it between blotting paper, and let it remain until just damp enough to be pliable. Then coat the face of the picture with good starch paste, and lay, face down, on the glass. Commence in the centre of the picture and rub outward toward the edges to dispel all air and excess of paste, care being observed not to get paste on the back of the print. While rubbing keep the paper damp with a sponge. When dry lay on a heavy coat of castor oil, and after a time rub off the excess of oil with a cloth. After standing a day or two it may be colored. Cover the back with a thin plate of glass, and bind the edges.

CLEANLINESS.—Dr. N. H. Paaren writes as follows in the *Western Stock Journal*: It is true in all cases known to us, that the finer instincts agree with the conclusion of laborious scientific research. The great laws of nature do not jar, but show a constant harmony; and it is pleasant to see the education of these truths, which may sound too grand to be mentioned in connection with the operation of cleaning a stable. We cannot, however, refrain from admiring this harmony, when we see the busy housewife and clean, industrious male servant scrubbing at floors and furniture, apparently perfectly clean, and washing and scalding dishes which we would at first sight think might be purified much more simply. Their instincts are true. You come into the room after the furniture has been scrubbed, and you breathe a fresher air, and are in fact a healthier, and therefore a happier and better being. You eat of these dishes—the food tastes better and it digests better; you therefore become, from this cause also, healthier and happier. The reason of this is, that the furniture receives upon its surface the organic matter arising from all living creatures, which after a time is apt to become unpleasant and unwholesome. Every chair, then, and every table becomes a source of disease; every piece of the wall and ceiling are the same. This is especially the case with the furniture most in use; every touch of the hand—even the whitest hand—is a source of impurity, and that which is used most has most need of being cleaned. Many porous bodies—and amongst these, cloth—take up these odors in great abundance, and sometimes retain them so much as not to give out any perceptible quantity until they are very much filled. We find this to be the case with carpets, which do not till after some time become offensive and stifling, but when they are so, are very difficult to clean. The process of cleaning is too often confined to beating. It is to be hoped that washing of carpets will become more general. Until this is the case we shall never get quite free from the unwholesome mustiness of some of our floors.

ICE WATER WITHOUT ICE.

Toselli's cooling goblet consists of a cylindrical cup for holding any liquid, into which may be plunged an inner goblet shaped like an inverted truncated cone, and having a bed which rests on the outer cup. Putting about 4 ounces of nitrate of ammonia in the inner goblet, filling it with cold water and stirring it, so as to hasten the solution, the temperature of the outer liquid is soon reduced at least 22 degrees Fahr. The salt may be used for an indefinite period by spreading it on a plate after each trial, and exposing it to the sun until it crystallizes anew. The inventor prepares a salt which will lower the temperature 50 degrees Fahr. in the warmest countries.