## USEFUL CEMENT.

Dissolve five or six bits of gummastic, each the size of a large pea, in as much spirits of wine as will suffice to render it liquid. In another vessel dissolve in brandy as much isinglass, previously softened in water, as will make a 2 oz. phial of strong glue, adding two small bits of gum ammoniac, which must be rubbed until dissolved. Then mix the whole with heat. Keep in a phial closely stopped. When it is to be used set the phial in boiling water. This cement perfectly resists moisture, and it is said to be able to unite effectively two surfaces of polished steel.

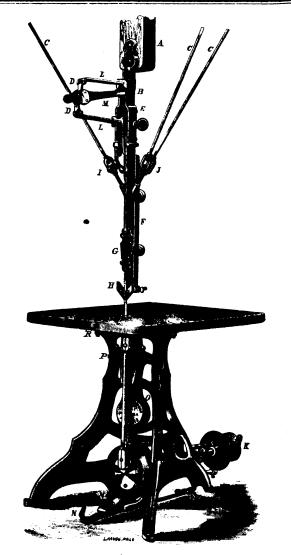
RED JAPAN VARNISH.—The simplest way to make this is to procure a stick of the best red sealing-wax, break it into small pieces, and drop it into a wide mouthed bottle; then cover the sealing-wax with strong alcohol; cork the bottle, and set in a warm place. When thoroughly dissolved, it will be fit for use. You can dip your little twigs in it "to make them look like coral." The varnish soon dries, so you can give several coats, it needed, without much trouble. Poor sealing-wax will make an unsatisfactory varnish. Buy of a stationer, who knows what a good article is.

A CARD-BASKET.—I know of no better pattern for "a card-basket of perforated card-board," than that with a hexagonal base and six five-sided pieces around the sides. Fig. 1 shows you half of the sides sewed upon the base. Let each side of your hexagon be exactly one inch and three-quarters wide. Cut your side-pieces of the shape of Fig. 2. (You will see the dimensions marked upon it.) Bind the pieces around, with narrow lute-string ribbon. You can either work some little design on each piece with silk or worsted, or you can stick a little picture upon each. Overhand the pieces together (as seen in Fig. 1.) Be careful to sew to the hexagonal base the side of the five-sided piece which measures 1½ inches. A little bow of lute-string at the top (inside) of each side seam, will add to the effect.

India Rubber from Landolphia Florida. — So much attention has of late been given to new sources of india rubber, or to the development of those already well-known, that the following note on the character and mode of collecting the milky juice of Landolphia florida in western tropical Africa may be of interest. Though the plant abounds in caoutchouc, which exudes from the slightest cut or wound, it does not run out with such freedom as to enable it to be collected in vessels, but forms a ridge or mass around the wound, which is regularly taken off. The blacks are said also to collect it "by making long cuts in the bark with a knife, and as the milky juice gushes out it is wiped off continually with their fingers and smeared on their arms, shoulders, and breast, until a thick covering is formed; this is peeled off their bodies and cut into small squares, which are then said to be boiled in water."

A Dressing for Patent Leather. — When patent leather boots or shoes lose their original lustre, they may be revived by a very simple dressing. Sugar one pound; Gum Arabic, in powder, one ounce; Ivory-Black, one pound. Add a pint of water, and boil together, stirring, until the Gum and Sugar are well dissolved. If too thick to apply smoothly, add more water. Let stand for a few hours for the coarser portions of the ivory-black to settle, then pour off and bottle. This is to be applied to the patent leather with a soft camel's-hair, or badger-hair brush. When a new application is to be made, the former coat, if too thick and stiff, may be removed by washing it off with a damp cloth. This renews the lustre of patent leather perfectly, and was given us by a gentleman from Europe, who paid his French valet a round price for the secret.

THE POTATO-BEETLE. — The experience of last season has shown how easily the potato-beetle may be vanquished. Notwithstanding this pest, potatoes are plentiful in New York markets, at \$1.50 a barrel, and farmers seem to think that these prices are better than those for most of their products. The fight with the beetle, to be successful, must be swift, short, and sharp. No other remedy is so certain as Paris Green for the larvæ, and hand-picking for the first crop of the beetles. Hand-picking early in the season, prevents the deposition of thousands of eggs, and every egg destroyed diminishes the late crop by hundreds or thousands. If farmers would only work for one year, and destroy the beetles as long as one is to be seen, sparing none of the late crop, there would be an end of them, practically, for ever afterwards. To spare the latest brood is to save seed for the next season.



## IMPROVED SCROLL SAWING MACHINE.

The scroll saw, as shown in this cut, has a rotary blower attached to the frame below the parallel adjustable slides, also a combined clamp and hook fastening for the blades, and is furnished with an iron and wood table as preferred. The frame is a rigid casting of suitable form and made in one piece, the upper works being secured to the post A, hung from above, and kept in place and adjusted by the rods *CCC*, and hand nuts J, at the sides and rear. The most important point to be considered in the construction of machines of this class is the manner of straining the blades, and the makers claim an especial effective, simple and durable arrangement for that purpose. It combines the head E, steel springs LL, steel anti-friction links DD, and lever M, arranged to produce an even tension on the blade at all points of the stroke, and the strain may be varied at pleasure, by turning the hand screw I directly in front of the operator. The spring the hand screw I directly in front of the operator. The spring head E also slides up or down the standard B, so that the same length of strap is always used for blades of different lengths. The hold-down F and the slides G may be adjusted independent of each other for thickness of stuff or length of blade, and the bank and side guide H removed, when not in use, for long and narrow blades. The wood or metal guides around the saw are adjusted by screws R in front of the table, and the hook fastenings for the blades are made to fit any thickness, the lower one combining both clamp and hook.

An improvement in the manner of adjusting the lower slides  $P_i$  allows them to be set up for wear, &c., and kept parallel without trouble or loss of time. The sawdust blower O is attached to the frame and run by a pulley on the balance-wheel shaft, a rubber tube (not shown in the cut) conducting the air to the work above.