## Srientific Ammitam.



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To Make Blacking.
Take $1 \frac{1}{2}$ oz. gum arabic, half an oz. copperas, 2 oz . muriatic acid (spirits of salt), and 4 oz, ivory black moistened with half oz. oil of vitriol diluted with three or four times its weight of water. Mix them well together, and then add 4 oz . of sugar candy, $1 \frac{1}{2}$ of sweet oil, and three pints of vinegar, which, being shaken, then spread lightly over the boots, and rub with a stiff brush until dry, when it will give a brilliant jet black.
The following is another method for render ing leather impervious to water:-
Dissolve 1 oz . of glue in 2 pints of water, and add 4 oz . of ivory black and 2 or 3 oz . of sugar, mix this with a solution of gum elastic (india rubber), and rosin prepared with spirits of turpentine and linseed oil. Having rits of turpentine and linseed oil. Having
first moistened the leather with a decoction of first moistened the leather with a decoction of
oak bark, apply this composition which, when dry, will render the leather water proof. In the above preparations, larmp-black will answer when ivory-black cannot be obtained.

## Cod Liver Oil.

A physician of eminence desires us to state that this nauseous medicine may be administered without the least disgust to a patient, by chewing and swallowing a small quantity of the roe of a smoked herring, both before and after taking the spoonful of oil. A piece of sardine will answer if herring is not paletable. The disguise is perfectly effectual, and the most delicate patient may thus use the physic with comfort.
[The above is taken from the " Charleston Mercury;" as the cod liver oil has become such a panacea for every ill that flesh is heir to, the above method ot taking it with some relish may be of benefit to many invalids.

## To Make Coffec.

The best way of making coffee is to put the ground coffee into a wide-mouthed bottle over night, and pour rather more than half a pint of water upon each ounce and a half, to cork the bottle, in the morning to loosen the cork, put the bottle into a pan of water, and bring the water to a boiling heat; the coffee is then to be poured off clear, and the latter portion strained; that which is not drunk immediately is kept closely stoppered, and heated as it it wanted.

## Bite of Mad Dogs.

An English iournal says that an old Saxon has been using, for fitty years, and with perfect success, a remedy for the bite of mad dogs, by the agency of which "he has rescued many fellow-beings and cattle from the fearful death of hydrophobia." The remedy is to wash the wound. immediately with warm vinegar or tepid water, dry it, and then apply a tew drops of muriatic acid, which will destroy the porson of the saliva, or neutralize it, and the cure is effected.
"The Corner Stone," Columbus, Ga., has a sensible article on the trip of the Ericsson to Alexandria. The Editor says, " to our mind it [the Ericsson] is a dead failure."

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The annexed engravings are views of a $\mid \mathrm{E}$, by means of the screw, $\mathrm{H}^{2}$, with hand carving machine for which a patent was granted to C. E. Bacon, of Buffalo, N. Y., on the 21st of last September.
The nature of the improvement consists in giving to a vertical or inclined cutter a motion laterally in any direction, at the same time it has a rapid rotary motion, for the purpose of carving from patterns or originals previously made.
Figure 1 is a perspective view of the whole machine for accomplishing the purpose ; figure 2 is a vertical section of the cylinders, J and $\mathrm{J}^{2}$, with their accompanying parts.
A A is an upright cast.iron frame; B B, B $B$ are cast-iron ways. The uprights (sliding frame) $\mathrm{D} D$, are connected together by the

## Fig. 2.


rods or ways, E E, extending across from side to side, and slide upon the ways, B B, simultaneously, by the power of the screws, F F upon the top and bottom of the frame
Upon these ways or rods are the slides, $\mathrm{F}^{2}$ $\mathrm{F}^{2}$, connected by the bar, G . The nut, H , being bolted to the centre in the manner shown in the engraving. The object of this nut is to carry the guides or slides, $\mathrm{F}^{2} \mathrm{~F}^{2}$, gradually backward and forward upon the ways or rods, E der, J2 surround


#### Abstract

wheel, I. Upon each of these slides are flanges by which they are bolted. The upper


 one to the cylinder, J , to a like flange or lip projecting from it, and the lower one to the bearing, K , of the cutter stock, L . This cutter stock or mandril, L , has the band wheel, M , upon it, by which it is driven. The arms, N N, O O, and P P, form a folding frame, with centres at $n n$, and $p p$, the centresin the upper part of the frame correspending with those in the lower part as represented.Between these two corresponding centres are the double band wheels $Q$ and $R$, each bearings around which the ends of the arms, $N$ $\mathrm{N}, \mathrm{O} \mathrm{O}$, and PP, form the joints, so that their centres shall correspond, and the band wheels be kept at equal distances from each other, whatever position the folding frame may be made to assume. The double band wheel, S , turns, upon the same shart upon which the two ends of the arms, P P, turn and receive their motion from the engine
The original pattern is placed on the lower side of the upper bed piece, $A^{2}$, and there is extended from the cutter to this pattern a non-revolving pointer or tracer, which, although it does not revolve, is attached to the mandril, which supports and revolves with the cutter. This pointer traces the curves, cavities, and irregularities of the original pattern, and guides the cutter to cut a new pattern in the wood placed on the lower bed piece, $a^{2}$.
In order to keep the tracer up to the pattern, and at the same time give it perfect liberty to rise and fall with the irregularities in the surface of the pattern, the cutter stock and cylinder, J , are constructed as follows, sectioned in figure 2.
J is an outside cylinder, with a circular shoulder in the inside near the bottom. Slidder, J2, surrounded by a spiral spring whic
rests upon the shoulder above mentioned, and presses upon a similar one on the outside of $\mathrm{J}^{2}$, near its top. The mandrıl, L , is prevented from sliding downward by a shoulder in the inside cylinder, upon which the head of the mandril rests, the tracer stock being screwed down to it, holds it to its place, and allows it to revolve freely, while the tracer and inside cylinder have only a vertical motion as they are acted upon by the spring and pattern, being prevented from turning by a feather and key seat. The cutter mandril has also the vertical motion with the inside cylinder.
By means of the sliding frame being moved longitudinally by the screws, F F, the folding frame already described may be pushed round through the end of the machine, and the cutter thus receive a longitudinal as well as lateral motion by the slides, $\mathrm{F}^{2} \mathrm{~F}^{2}$
The sliding frame, screws, \&c., may be detached from the cutter and folding trame, and the same may be governed by hand, and thus be made to cut almost any irregular form, and leave the work smooth and clean ready to sand paper. The lower platform or bed may be raised and lowered by the screw, $Z$ in the centre as represented and the corners set by those shown on the corners of the same, to the purpose of adjusting the work to the cutter.
Various kinds of cutters may be used varying according to the work to be performed. More information about rights, \&c., may be obtained by letter addressed to the patentee.
It is stated that the various expeditions hat have been fitted out within the last five years, for the discovery of Sir John Franklin, have cost an aggregate of $£ 728,466$. Nearly eight years have elapsed without tidings from the missing voyagers. No less than 15 expeditions in all, consisting of thirty vessels besides boats, have been engaged in the pursuit, and the effort is still continued.

