

## THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL, AND OTHER IMPROVEMENTS.

### VOLUME X.]

## NEW-YORK SEPTEMBER 23, 1854.

# **(NUMBER 2.**

### SCIENTIFIC AMERICAN, PUBLISHED WEEKLY At 128 Fulton Street, N. Y. (Sun Buildings.)

THE

BY MUNN & COMPANY. S. H. WALES, O. D. MUNN. A. E. BEACH.

A g e n t s. A g e n t s. Dexti ederhen & Co., Boston. B. Du tokes & Bro., Philadelphia. M. B. e Count & Strong, San Fran. E. W. G. Courtenay, Charleston F. C. Very Reliferat A g e n ts. H. Taylor, Baltimore, Md. Federhen & Co., Boston. Stokes & Bro., Philadelphia. Ge Court & Strong, San Fran. E. S. G. Courtenay, Charleston. Very Bellford & Co., Lon-M. M. Gardissul & Co., Pari-S. W. Pease, Cincinnati, O.

Responsible Agents may also be found in all the principal cities and towns in the United States.

TERMS-\$2 a-year :-\$1 in advance and the remainder in six months.

### Devil's Shoe Strings.

A correspondent writing to us from Leavenworth. Indiana, describes a running vine on the Ohiobottom lands which gives the farmers a great deal of trouble, and which he says, "grows twelve feet long in a season, and cannot be killed by grubbing or plowing." It is like a strong grape vine, bearing yellow and red blossoms, as large as a teacup, and in form like those of a lily. They are known by the name of "Indian Creepers," and "Devil's Shoe Strings," and our correspondent would like to know of some successful method of extirpating them. If plowing and grubbing cannot destroy them, we do not know how they can be by any other plans.-We would reasonably suppose that by plowing and grubbing, and never allowing them to blossom, that they would be extirpated. The labor, no doubt, would be great, but continued perseverance would, we think, be crowned with success.

# Vermont Gold.

We have received a letter from a correspondent respecting the remarks we made in our last volume relating to the reputed discovery of gold at Bridgewator, Vt. He says that our remarks were just and correct ; that he recently visited Bridgewater, and went to the reported gold mines, about five miles N. W. from the village. Hetherefound persons working a vein of quartz, of about ten or twelve inches in width, imbedded in gray slate stone, but he could not see a single particle of gold. He saw some specimens of lead and sulphuret of iron, but that was all. A number of the inhabitants went there and excavated for gold, but all they made was---0.

### ----Sawing Fire Wood.

The accompanying figure is a perspective view of a machine for sawing cord wood, for which a patent was granted to Jean J. Efferem, of Springfield, Illinois, on the 1st of last month.

A is a substantial common saw horse ; below the common brace which unites the double cross legs of the horse, there passes a shaft with a crank, B, on it; the shaft is supported in bearings held up by chains between the legs, A. C C are fly wheels on this shaft. D is an arm (there is one on each side) connected to the crank shaft; it is formed of two parts with teeth, so as to shorten and lengthcordage. en the same, for the stroke of the saw, as may be required. E E are vertical leversattached to the arms, D, by wrists, F. The saw, G, is attached to the upper parts of levers E E, by a strap. The lower ends of these levers are secured to the saw horse by connections at H. I is a brake or shaft capstan, which is employed to work a chain that supports the bearing boxes of the fly wheels, when the machine is at work sawing, and to lower them to the ground, to use the fly wheels to run the machine from place to place like a cart. K is a slot in one of the legs of the saw-horse, The accompanying figure is a side view- which a patent has been applied for by Joseand there is a like slot in the other leg .-in perspective, with a plate of the casing re- phus Chandler, of Attica, Ohio. These are for the purpose of receiving the moved-of a Rotary Pump and Engine, fo A is the inlet, and B the outlet or discharge in houses where there are children.



and hold it firm to the action of the saw.

motion through the agency of the levers, E, wheels, as shown and described. and their arms operate the crank, B, of the fly-wheels shaft. The fly-wheels, it is inferred, ter addressed to Mr. Efferem.

ends of handles, like the stilts of a plow, to accumulate the power, and tend to produce push the machine forward when removing it an easy uniform motion for the operator, who from one place to another. L is a lever or must slide down the saw as it cuts downdog to confine the billet of wood in the horse, wards through the strap that connects it with the vibrating levers, E E. The claim is for By pulling the saw the fly-wheels are set in the combination of the saw horse with the fly-

More information may be obtained by let-

### ROTARY PUMP AND ENGINE.



pipe; the office of these pipes, however, may be reversed, and they may be used either for water or steam. C is the case, within which is a chamber resembling an inverted heart in form. At the point, f, of the case suitable packing is inserted, which extends through the whole breadth of the chamber. E is a piston corresponding in width to the chamber; its ends, e e, have packing inserted into them, where they bear or rub against the innerface of the case. D is the shaft drum, with an oblong slot through it, in which are friction rollers, and in which the winged piston, E, slides back and forth, as the shaft is revolved. The shaft has its permanent bearings in the end plates, G, of the case, which are secured by screw bolts, c c, to side plates which have flanges at g, to receive them. The side plates are made in two sections and united by clasp flanges secured together by bolts, II. All the seams are packed to make the case perfectly steam and water tight. H is a lever handle to rotate the shaft. Some part of the drum, D, of the shaft is in constant contact with the packed point, f. As the wings of the piston, E, work air-tight in the chamber, and as the pipe, A, (or vice versa) is connected with a pipe submerged air-tight in the well or cistern, it follows that the water will flow into the chamber through the pipe behind or under one side of the wing of a piston, and be driven out befere it on the other side through the pipe, B. Owing to the position of the induction and eduction passages near the inner projecting lower part of the case, a constant stream of water is received and discharged.

More information may be obtained by letters addressed to Mr. Chandler.

#### 4.00.0 Colt's Revolvers in London.

We perceive by a letter in the London Morning Advertiser, that in some London paper (the name is not given) a correspondent has been making wrong and unfavorable comparisons between Colt's and some other pistols now being made by some English manufacturer. It seems by the correspondence of the Advertiser, that the great advantage claimed for the English over the Colt pistols, is an arrangement of the lock, which had been used but abandoned by Col. Colt as a defect, as it tended to divert the aim of the person using it. It is asserted that Col. Colt has not received fair play in London. We regret this, for he has no doubt conferred a great benefit upon the War Department of England by establishing a manufactory for his revolvers in that country.

### New Material for Paper.

Among the many substances which we have seen recommended to be used for making paper, E. Merriam, of Brooklyn, suggests the wild cucumber plant as one which is eminently suitable for furnishing a substitute for rags. He says that it is of rapid and luxuriant growth, and a single seed will produce more than one thousand feet of vine, which,

when properly cured, may be converted into To Clean Brass. If brass is corroded with oxyd-green or black-it can be removed by rubbing it with some diluted acid, such as sulphuric. This is rubbed on the brass with a cloth or sponge, and the brass then washed in hot water. After this the brass must be well rubbed with rotten-stone and sweet oil, and finished with whiting or tripoli. Some persons use oxalic acid dissolved in water, instead of sulphuric acid, for the above-named purpose, and it is indeed more convenient, but it is very poisonous, and is therefore dangerous to keep