## 4if in

C. C., of Conn.-The best test for the presence of lead in water is sulphuretted hydrogen, whieh produces a black de posit.
D. McD., of Wis. -The weight is, as you say, the principal objection to traction engines for plowing, reaping, etc. In England they are used to some extent in dockyards, but the use does not seem to exten yery rapidy, probably because there are few places in which they are more convenient than horses
J. H., of Pa.-You will find the geology of petroleum very fully stated in No: 20 of our last volume, pages 308,314 an 315.
J. S. T., of Va.--We do not know of any place where a diagonal connection between a brace and bit can be had. Get
J. E., of Mass. - Bify "Bourne's Catechism," it is far better than Campin's work. H. C. Baird, 406 Walnut street, Philadelphia, will furnish it.
T. F. C., of Wis.-A slide has been used to cover the outside keyhole when the door is locked. If you will submit to us a sketch of yours we will give our opinion in regard to it.
O. B., of Mo.- The Justice must affix to the oath at tached to the specification a five cent revenue stamp. The cer chine or an individual who ha
E. S. V., of Pa,-We gave Mr. Burns address in our paper in connection with his letter. If yous desive to \%reach him in our paper.
B. E. C., of S. C.-We shall be glad to receive from you an article upon the salt deposit upon steam boilers.
D. S., of Mass.--The cheapest plan for making hydrogeu on a large scale is by decomposing water by means of heated charcoal or coke; zinc is a very costly material for this purpose. E. J.; of Mass.-Ivory is bleached by soaking it in waler, and exposing it to the action of the sun.

## Money Received

At the Scientific American Office, on account of Patent effice business, from We nessday, Dec. 14, 1864, to Wednesday. Dec. 21, 1864:
T. L., of N. Y., $\$ 30$; II. W. H., of Conn., $\$ 20$; I. F. B., of Conn., $\$ 20$; M. C. D., of Ohio, $\$ 20$; J. H. S., of N. Y., $\$ 20$; H. Y., of N. Y. $\$ 20$ C. F. B., of N. Y., $\$ 45$; J. S., of Ill., $\$ 45$; F. L., of N. Y., $\$ 15 ;$ J P., of N. J.. \$45; H. \& W., of Cal., $\$ 25$; H. B., of N. Y., $\$ 15$; W. H. S., of N. Y., $\$ 20$; T. S., of N. Y., $\$ 20$; Mc., of N. Y., $\$ 10$; C. C., of
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TOR SALE.-ONE FLUE BOILER, 30 FEET LONG Hy by inches diameter, with two 14 inch return flues, including



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## Improved Ohio Corn Husker

The accompanying engraving represents one of the simplest, most durable and efficient devices for husking corn we have seen. This husker can be worn over a mitten or glove as easily as upon the naked hand, and, therefore, enables a man to husk corn as comfortably in cold weather as to perform any other work.
This husker also saves the hands from becoming sore, and greatly facilitates the operation. It is applied around the center of the ear of corn, not at the point, and with its hooking tooth, A, a singlepass will remove the husk in the most perfect manner much better than can be done with a peg. It is made wholly of brass, and will last for years.

This invention has now been in use for two years
mirably, preserving the delieate parts of the plan and preventing decomposition. He immediately saw that this property of glycerine might be made available for certain pharmaceutical purposes, where it was desired to preserve or extract the aromata of vegetable products, such as elder, orange, or rose flowers, and also might be substituted for the oils and fats used in the purest process termed enfleurage. The glycerine need not be especially pure, but should be devoid of odor. The elder-flowers should be gathered when the corolla is fully expanded, but not too tar gone; they should then be plucked from the stem, and packed firmly in wide-mouthed bottles or jars, without crushing them; and the whole should then be covered with glycerine. Mr. Tichborne says that he has thus preserved flowers for two years, and, on
through. This shovel is also useful tor carrying fire from one place to another, for by the introduction of the grate a draft is maintained which keeps the coals alive much longer than ordinary shovels. A patent was issued to J. H. Porter on the 3d of December, 1864, through the Scientific American Patent Agency. For further information address him at 15 Hudson street, New York.

Sile Werms for France.-The San Francisco Bulletin says: "Macondray \& Co. will ship by the Constitution, 64 cases of silk worms, which wede recently received from Japan, on an order for parties in France. They will be conveyed to New York and thence to Havre. The French silk worms have become diseased, and it is proposed to try the experiment of restoring them to health by admixture with a new stock, or by substituting the latter for them entirely. The Japanese worms produce a very good quality of silk. It may not be generally known in this connection that Provost, the California silk culturist, has for a considerable time been forwarding his healthy larvæ to France."

## TO

## INVENTORS, MECHANICS, AGRICULTURALISTS

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Mr. C. R. Tichborne states that, being desirous of preserving a vegetable lusus naturce for some time, he submerged it in some weak glycerine, considering that that fluid would be less likely to destroy the tender organism, and also remembering that it had been found most efficientin the preservation of animal tissues. The glycerine answered its purpose most ad-
distilling them, procured a water, the perfume of which has equalled the most recent product. For the preservation of the flowers he considers the em ployment of glycerine far superior to the system termed enfleurage, in which heat is used.

## PORTER'S SIFTER SHOVEL.

Every economical housekeeper sifts the ashes and refuse coal left after the fire has been turned out a

night. By so doing a very marked saving occurs fully equal to one-third of the whole ash heap.
A shovel which combines a sifter with its other qualities is a very convenient article for the purpose referred to; the one here illustrated is well designed for the object in view. It is made of cast-iron and has a grating at the back part for the ashes to fall
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