

Improved Step Ladder.

A step ladder would seem to be the last thing to improve or modify so as to radically change its construction, and it is a good proof of the versatility of inventors that they have taken this simple thing in hand and greatly improved it.

This step ladder is much lighter than the old-fashioned affair, and at the same time much stronger. The one here illustrated will safely bear the weight of three men.

By referring to the engraving the reader will see that the sides or main supports of the steps are bow-

for its beautiful red color, which is best seen when a fragment is held between the eye and the light. This character has earned for it the title of 'ruby silver,' by which it is generally known. The color, however, is so deep that stout crystals, or opaque masses, appear nearly black by reflected light, hence this specimen is also known as 'black silver.' When powdered, it is cochineal red, and this may be shown by scratching it on a file. It is often found in very perfect crystals, which belong to the rhombohedral system. The prisms are six-sided and terminated by three or more planes. Specimens from Mexico have assayed sulphur 18, anti-

Fig. 1

**BOND'S STEP LADDER.**

shaped. They are also twisted on the inner side, so that great rigidity is given with less material. This twist is obtained by cutting the steps at varying angles, so that the desired curve is secured. A section of this ladder will appear as shown in Fig. 2, the different blocks or squares representing the parts as they appear when cut through the middle vertically. For gardeners or in stores, in fact in all places where

Fig. 2



such ladders are used, this one will be found convenient. It was patented on the 5th of April, 1864, by W. E. Bond, of Cleveland, Ohio; for further information address as above. State and county rights for sale.

A Rare Mineral.

The Reese River *Reveille* of 1st March, says:—We saw lately, taken from the Warner and Wells lode by the Perseverance Company, a specimen of crystallized ruby silver ore that for beauty and rarity was a gem seldom equaled. The specimen consisted of a mass of crystals of some dozen or more, weighing about four ounces, of pure ore of the general class of antimonial sulphuret specified by Blake as "pyrar-gyrite." He says of it: "This silver ore is remarkable

mony 21.8, silver 60.2. This ore is found in Mexico and in several of the silver mines of Europe."

Bleaching Sponge.

I recollect seeing a few months since in your journal some processes for bleaching sponge, but I think in each case the sponge had to be immersed in an acid solution. I have found the following a better way, inasmuch as nothing except gaseous chloride comes in contact with the sponge. In the first place, I get a box and a basin; I then put some sponge on a flat surface, and invert the box over it; in the basin I put some "chloride of lime" and sulphuric acid, and place it under the inverted box. The chlorine becomes quickly disengaged, and in a few minutes imparts to the sponge a nice white appearance, apparently without the slightest injury to its texture. The operation had better be performed in the air, as it soon fills the room or house with a powerful smell of chlorine.—A. W. S., in the *Chemist and Druggist*.

Wild Peppermint as a Rat Exterminator.

Alex. Robertson, writes to the *Canada Farmer*—"I have for the last four years proved to my satisfaction that the 'Wild Peppermint' is a sure and reliable exterminator of rats. In proof of the fact, I will state the result it has had with me. Four years ago my barn was regularly infested with rats; they were so numerous that I had great fears of my whole grain being destroyed by them, after it was housed; but having about two acres of Wild Peppermint that grew in a field of wheat, after the wheat was harvested, the mint was cut and bound with it, and drove the rats from my premises. I have not been troubled with one since, nor am I at present, while my neighbors

have any quantity of them. I feel confident that any person who is troubled with these pests, could easily get rid of them by gathering a good supply of the mint and placing it around the walls or base of their barns."

TO REMOVE THE TASTE OF NEW WOOD.—A new keg, churn, bucket, or other wooden vessel, will generally communicate a disagreeable taste to anything that is put into it. To prevent this inconvenience, first scald the vessel well with boiling water, letting the water remain in it till cold. Then dissolve some pearlash, or soda in luke-warm water, adding a little bit of lime to it, and wash the inside of the vessel well with this solution. Afterwards scald it well with plain hot water, and rinse it with cold before you use it.

PROFITS OF THE OIL TRADE.—The aggregate yield of oil per day, says the *Insurance Reporter*, in all the oil regions of the United States is 6,000 barrels. On this, in its crude state, the average profit is about five dollars per barrel, so that the net profit on all the crude petroleum produced is \$30,000 per day, nearly \$11,000,000 yearly.

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