A NEW LIGHTNING ROD

A correspondent in Albion, N. Y., communicates a somewhat novel plan for a lightning conductor. He says: "We are in this part of the country using quite extensively, thin strips of sheet copper, nailed to the building, as lightning rods. The plan is to use a thin copper tube, about ¾ of an inch in diameter, along and above the chimney, which at the ridge of the roof is flattened, and riveted to two thin strips of copper about an inch wide each, and these are occasionally nailed along the roof and down the side of the building, and let into the earth a few feet." This conductor if properly put up would surely be efficient. But our correspondent omits to give particulars of perhaps the most important thing to be considered in the erection of a lightning rod, namely, the connection with the ground. He says, "the strips are let into the earth a few feet." Electricity is very particular about the road it travels; it does not hesitate an instant to turn aside if an obstruction is offered to its course; if the way is not perfectly clear to get into the earth, it may prefer to dart into the house and set it on fire. Dry earth is almost a non-conductor, and a rod might as well lie along the ground a few feet, and take the chances as to be buried in dry earth. It is almost a common occurrence for the ground to be plowed up and even wetted in spots around a lightning rod, a fact which shows that those who put up rods, are either ignorant or neglectful of their duty. In a city, lightning rods should invariably be put in metallic communication with the gas or water mains, and in the country with a stream or well of water. If this rule were followed we should not hear of half the number of cases in which buildings having rods are injured by lightning.

Whether a lightning rod be of iron or copper, or square round or flat, or whether the conducting power resides on the surface or through the mass are questions of very little practical consequence beyond the effect they may have on the cost of construction. We have never seen a rod or heard of one being used, which was too small or too poor a conductor to carry of all the electricity which its point would receive. Lightning leaves a rod to go into a house only when its continuity is imperfect, or as is more likely to happen, when it cannot discharge itself into the earth.

NEW PLANET DISCOVERED.

OBSERVATORY, Washington, Sept. 17, 1860.

SIR: A planet was discovered here last Saturday night, by Mr. Ferguson, at 9h. 19m. 38. 6s. in 23h. 4m. 38. 5s. of A. R., and 3° 22m. 53. 8s. South declination. It was first seen by him the night previous, but the observations were not conclusive as to its true character. This is the fifty-ninth in the family of asteroids, and the third discovered by this indefatigable assistant.

It remains to be seen whether we have been anticipated in this discovery. If we have not, and unless you direct otherwise, I propose to name this new star from the Indian mythology of this continent.

Respectfully,

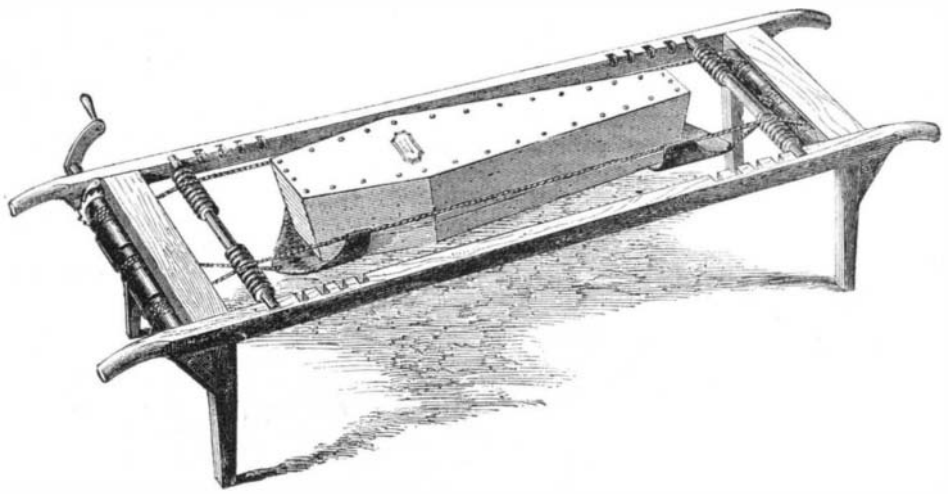
M. F. MAURY, Superintendent.

HON. ISAAC TOUCEY, Secretary of the Navy.

PATENT BIER AND MODE OF LOWERING COFFINS.

The life of this age, most assuredly, moves on patent inventions. The infant is wrapped in linen which has been woven upon a patent loom, from yarn spun upon a patent frame, and he draws his first drop of nourishment from his mother's breast through a patent nipple shield. The girl fondles a patent doll, the boy whirls a patent top or plays with a ball which is made under one of the most valuable patents of the age. In later life we put on a patent French yoke shirt, which, with the rest of our clothes, is sewed on a patent machine, with a patent thread, by a patent needle, which comes enveloped in a patent wrapper, and our very boots are made of patent leather. We rise in the morning from a patent eliptic spring bed, undo the patent fastenings of our windows, roll up our patent curtains, open the patent lock of our doors, which was constructed by patented machinery, and go down to our coffee, which is made in a patent "Old Dominion" pot. We write with one of Morton's pens, which we dip into patent ink in a patent stand. Thus, surrounded by patents, we pass our life, which is filled with gorgeous dreams of making a splendid fortune by some patent invention of our own, till at last we are placed in a patent burial case, and lowered from a patent bier into our final place of rest.

For this ultimate disposition of us all the patent bier here illustrated has been invented, and we have never described an invention which was more certain to be needed by every member of the community. The method of its use will be readily understood by examining the engraving. The cords, being adjusted to the width, and the supports which slide on them to the length of the coffin, are wound up tight, and the pawl put down on the ratchet wheel to keep them secure. The coffin is taken from the hearse and placed on the bier, each end resting on one of the support. The bier being carried to the grave and placed directly over it, the undertaker throws back the pawl, and, unwinding the cords, the coffin reaches the bottom. By unwinding a little more, the supports are drawn from under the ends of the coffin; the middle cord, being three or four inches shorter than the other, begins to wind up as soon as the coffin reaches the bottom, while the outside rope is still unwinding. The whole being then wound up, the bier is ready for another interment.



SCARLETT'S BIER AND MODE OF LOWERING COFFINS.

The patent for this invention was granted to the inventor, William Scarlett, and further information in relation to it may be obtained by addressing him at Aurora, Ill.

THE EMPTY BIER.

BY HANNAH GOULD.

"Thou empty bier that standest here,
Alone by the churchyard gate,
Say, whose the door thou'lt pause before
Thy burden next to wait?"

The bier replied, "My range is wide,
And my hours of rest but few;
But to One alone can the ways be known,
That I must hence pursue.

"I first may seek her form, whose cheek
Is fresh in its maiden bloom,
On me to lie with a rayless eye,
At the threshold of the tomb.

"The youth who last sped by so fast,
With the nerve and the glow of health,
He next may find, that close behind,
Death followed him by stealth.

"Or she, who smiled when the lovely child,
She was lately leading near,
With wonder stopped, and his lilies dropped,
To gaze at the sable bier;

"That mother may be called to lay
That beauteous boy on me,
In his morning hour, like the dewy flower,
He lost, and as suddenly.

"Her own pale clay, to bear away,
It next may be my lot,
She may close her eyes on her infant ties,
And her prattler be forgot.

"And as I call in time for all,
From the babe to the silver haired,
Thy glance at me, perchance may be,
A hint to be prepared."

HOW TO MAKE CLOTH AND PAPER INCOMBUSTIBLE.

Cloth and paper cannot be made to burn unless oxygen is present, and in the presence of oxygen there will be no burning unless there be a considerable heat to begin it; the combined presence of the three things, combustible, oxygen, and heat is essential. A plan, therefore, of rendering a combustible, fireproof, must provide for the removal from it, of either oxygen or heat, or both; the cloth or paper must be enveloped in a varnish which is of itself incombustible, and at the same time impermeable to oxygen and heat. If we had such a varnish, and it did not injure the pliability and other good qualities of the cloth and paper, the problem would be completely solved, and if the art could be practiced cheap enough, the occupation of the washerwoman would be gone, for we should send our dirty linen to the blacksmith, who would throw it on his fire, and when it became brilliantly white (hot), would take it off and hang it up to cool.

But we have no such varnish and the materials for its composition are quite beyond the present possibilities of chemistry. Our attempts at fire-proofing will be only distant approaches to the perfect plan.

There is no organic substance that does not burn, or is not destroyed by heat. Water, from the fact that it is a product of combustion will not burn, but it has not the other properties desirable; it does not dry up and leave and elastic covering. Thus far then, only mineral substances have been used for fire-proofing; and among these alum has been the greatest favorite. A piece of cloth or paper dipped in a solution of alum, and then dried, is tolerably safe from fire, the whole surface being covered with matter which will not burn. Alum also, has the property of taking up a large quantity of water still appearing dry, and it cannot be heated much above 212° before all the water has evaporated.

Soluble glass (silicate of soda) has often been proposed as a fire protector and especially for wood. Being glass when the water has evaporated, one would suppose it would be altogether too brittle for fabrics which must be flexible. Mr. F. A. Able, of Woolwich, England, however, has made a little advance on the old plans by proposing to impregnate tissues with a metallic silicate. The particulars of his process are as follows:

"I take," he says, "a solution of lead, of zinc, or, practically speaking, of any other metallic base capable of forming, by its action upon a soluble silicate, a double silicate, insoluble in water. For this purpose I prefer the use of a basic acetate of lead, prepared as is well-known, by boiling sugar of lead and litharge with water and although I have found that solutions of various strengths will answer the purpose, yet that which I prefer is prepared by boiling together, according to the following proportions—25 pounds of sugar of lead, 15 pounds of litharge, and 40 gallons of water, for about half an hour, allowing it to stand for about a couple of hours; the decanted clear solution forms a liquor well adapted to my said purpose. When I want to use the liquor so prepared, and which, in the present instance, is a solution of basic acetate of lead, I take such a quantity of it, as will be at least sufficient to cover completely the fabric or material which I intend to render uninflammable, or else the said fabric or material may in many cases be simply passed through the said liquid, raised to nearly the boiling point, the object being simply to saturate or impregnate it thoroughly with the said liquor. This having been done, the fabric or material so saturated or impregnated with the said liquor is to be removed and spread out for about 12 hours to the contact of the air. This hanging or spreading out of the fabric or material to the air, may be dispensed with, but I prefer to do so, the subsequent operation, now to be described yielding then, a better result. The material or