

Bank Note Splitting.

An English paper, *Keene's Bath Journal*, has the following:—

Mr. Thomas Millard, a native of Bath, now one of the Queen's book binders, under the librarian at Windoor Castle, has discovered a method of splitting bank notes or any other sheets of paper. By the courtesy of Mr. Gregory, of Bath street, with whom Millard served his time as an apprentice, specimens of the young man's ingenuity, consisting of a £5 Bank of England note, a sheet of the *Times*, of the *Illustrated London News*, of the *Bath Journal*, and of the *Daily Telegraph*, each of which has been split cleanly and cleverly into two parts, without any rent or tear, have been exhibited to many of our fellow citizens during the past week. There can be no mistake about the matter, as we have now before us a copy of a leaf of our own *Journal* completely split in two. The separate parts could well be printed on at the back, but the separation of the flimsy paper of the *Telegraph* seems equally complete. The engravings in the illustrated journal are brought out more clearly by the process, and when mounted on cardboard present a strikingly improved appearance. The discovery is applied by Mr. Millard to practical use in print, mounting, and in repairing torn leaves of books, which he can so skillfully manage that the junction of the new and old paper can with difficulty be distinguished. The mounting of old prints upon paper is also so complete, that the specimens we have seen seem impressed upon the original paper. Unscrupulous people would certainly turn this plan of bank-note splitting to profitable account, if they could find it out, inasmuch as the halves could be made as stiff as the whole, the blank parts could be printed in imitation of the original, and the water mark would of course be perfect. A cotemporary says that "Mr. Millard has devised a method of manufacturing paper that cannot be split, and bankers will probably soon be compelled to make use of his invention;" but this we understand is a mistake. Mr. Millard, to prevent the difficulty which might arise to the Bank of England for having their water mark left on blank pieces of paper, upon which might be printed *fac similes* of their notes, suggests a plan for the prevention of the fraud. We are glad to hear that her Majesty, in consideration of the talent displayed by Mr. Millard in this discovery, has already been pleased to order that he should have an increased salary. We hope his discovery may further lead to his pecuniary advantages.

Phosphorus for Mice.

The extinction of these destructive animals in the open field is practiced as follows in Germany:—Four ounces of phosphorus are fused under water, while two pounds of flour are being made into eight pounds of paste. This is stirred up gradually with the fused phosphorus, making an intimate mixture through which the phosphorus is minutely divided, and this is mixed by hand with sixteen pounds of grain, and then covered with flour in portions at the time, giving the grain a candied appearance.

From eight to ten of these grains are placed into the holes in the field, and this produces the desired effect within twenty-four hours. At a trial of this remedy, in a field covered with 1,666 mouse holes, they were first all carefully closed, but in the following day one half of them was again open. The required quantity of phosphorised grain was then placed in each hole, and the holes closed again. On the following day only forty-five were found open.

SMITHS' MODE OF SETTING TOMBSTONES.

In setting tombstones at the heads of graves it is common, in order to secure them in an upright position, to form a tennon upon the lower end which is inserted in a mortise in a larger stone buried in the earth. To make a perfectly tight joint, careful workmen generally pour sulphur into the mortise to fill any spaces around the sides or edges of the tennon, but this practice is objectionable as the sulphur frequently discolors the stone about the mouths of the channels, and the stones are liable to be still further defaced in efforts to remove the discoloration.

A far neater process which has been recently invented is illustrated in the annexed engraving. This consists in drilling holes from the bottom of the mortise through to the lower side of the base stone or

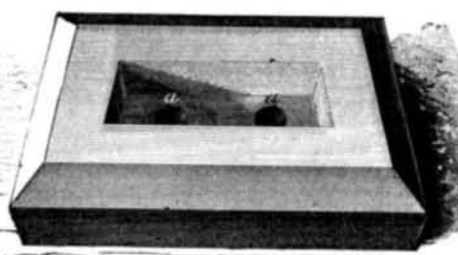
pedestal, and then after the tennon of the tablet is inserted, inverting the stones and pouring the sulphur into the holes. By this process all traces of the sulphur about the mouths of the holes are completely hidden from sight when the stones are reinverted and the pedestal is placed in the ground.

In order that the sulphur may be sure to flow along the sides of the mortise, channels are cut in both sides of the tennon, extending in the form of an in-

Fig. 1



Fig. 2

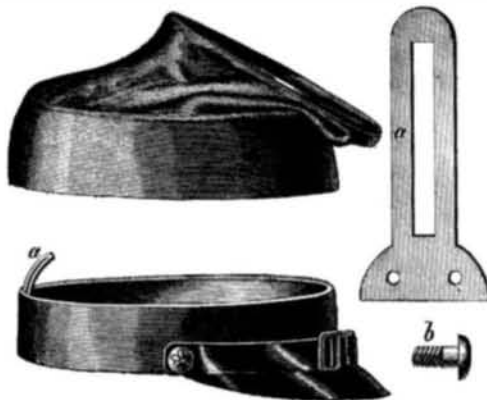


verted U, from one hole to the other. In order to show clearly the mode of forming these channels, *b b*, our cut represents the tablet, Fig. 1, apart from the pedestal, Fig. 2, while the pedestal is turned partly over to exhibit the holes, *a a*, from the bottom of the mortise downward through the stone.

The patent for this invention was granted, through the Scientific American Patent Agency, July 22, 1862, to the inventors, J. M. and G. W. Smith who have assigned it to J. H. Smith, and further information in relation to it may be obtained by addressing the assignee, at Port Chester, N. Y.

BLYTHER'S VENTILATING CAP.

Among the practices which generally prevail in the community there is probably no one more injurious than the wearing of a close and hot covering for the head, and we are always glad to see any efforts for mitigating the evils of this practice.



The annexed cut represents a ventilating cap, invented by J. O. Blythe, of Philadelphia, which may be drawn open to admit of a free circulation of air in hot weather, and may be readily closed for protection against the rain. It is formed of two parts which are represented as completely separated, but they are to be sewed together at the front and joined by a sliding clasp at the back. This clasp is formed of two parts, a thin metal plate, *a*, with a long slot in

it to be fastened to the lower part of the cap, and a large-headed screw or rivet, *b*, to pass through the slot in *a*, and be secured in the upper part of the cap. This allows the upper part to be raised so as to open a slit in the back and around the sides, and in case of rain the upper part may be readily drawn down so as to close the opening.

If it should be deemed preferable the upper part may be fastened to the lower wholly by sliding clasps, without any sewing; in this case three clasps will be required, one at the back and one on each side toward the front.

Further information in relation to this cap improvement may be obtained by addressing H. Coulter, 56 and 58 South Second street, Philadelphia, Pa.



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