

Improved Cane Stripper.

This apparatus is designed to remove the leaves from sorghum cane preparatory to crushing it for the juice. The inventors say that two men can do twice as much work with it as they can in the ordinary way. It will strip cane after it has been cut three or four days, and works equally well on green or withered stalks. The caps are taken off without bruising the stalks, which is very desirable to sirup makers. When early frosts come on, the whole crop must be cut and laid in windrows; this machine can then be used to advantage, either where the crop is lying, or in the barn, as it is light and easily transported. All the tops and blades are left in one place, which is better than having them scattered over the field. The several parts are as follows:

Four elastic arms, A, secured to the frame, B, are provided with cutters, C, and a gate, D. When the gate is allowed to hang down, the arms are extended as shown, and the stalk is entered from the front. As it is drawn through, the gate is pushed out of the way and the arms close upon the stalk, when the leaves are immediately stripped off—The heads of the cane are struck off on the knife, E, attached to the frame.

This invention was patented through the Scientific American Patent Agency Oct. 10, 1865, by Bishop & Gladden of Chrome Hill, Md. For further information address patentees or John M. Griffith, 49 North Paca street, Baltimore, Md. County and State rights for sale.

Writing Ink.

The boasted power that has been proverbially ascribed to the pen, should, in fairness, be shared with its unpretending associate, whose presence constitutes its sole claim for notice, and deprived of which, its power vanishes. We may look in vain through the whole field of chemistry for any preparation that has so far benefited the civilized world, or whose use is so universal, as this same writing ink.

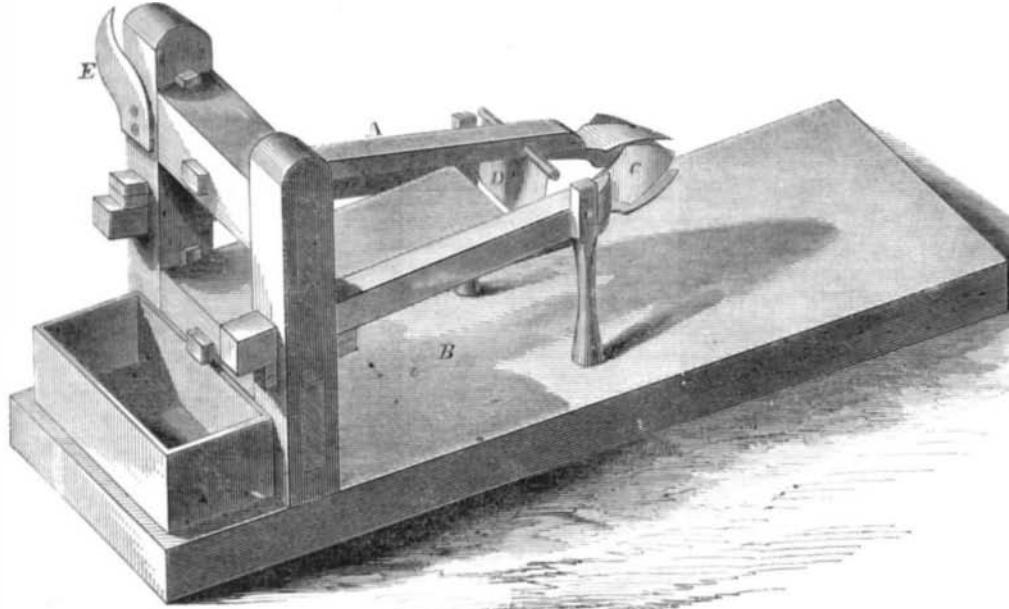
To fix a date for the introduction of ink would be impossible; its antiquity is only inferior to writing itself. We have early receipts for its manufacture, though the article seems to have been similar in composition to india ink, having a consistency much thicker than our writing fluids, from which cause the letters appear in relief, as if embossed.

During the middle ages fluid ink was used, and it is a fact not a little singular in this progressive age, that essentially the same constituents were then employed that are now made use of in some of our best inks. The truth of this assertion was proved, incidentally, a few years ago, while an examination was being made to ascertain the explanation for a fact often noticed by antiquarians, that while manuscripts of the fifth and sixth centuries now remain apparently as bright as when first written, those of comparatively recent date have often become almost illegible, and sometimes even obliterated. This superiority of the old over the new was then proved to be due entirely to the better preparation of the material upon which the writing was made, namely, parchment or vellum.

This question of durability is the one of greatest value in the selection of an ink. Although for many purposes the only requirement is that it will remain without fading for a few years, yet there is hardly a bottle sold some of which may not be used in the execution of documents, that may be required to be legible fifty or a hundred years hence.

In addition to innumerable methods invented from time to time for counteracting the effects of time, plans have also been proposed for guarding against

removal for fraudulent purposes. Some time since an eminent chemist suggested a curious mode for not only preventing the actual removal by chemical means, but also for detecting any unsuccessful trials that may have been made. He proposed first dipping the paper on which the writing was to be made into a solution of gallic acid. Any attempt to efface a word written on paper thus prepared, by any of the usual chemical methods, would result in forming a black ring around the character, which it would be impossible to erase without destroying the paper.

**BISHOP & GLADDEN'S CANE STRIPPER.**

The use of red ink is common in old manuscripts for the initial letters, also the titles of books, and headings of chapters. At Orleans, a charter of Philip I., of France, is preserved, dated 1090, which is written with green ink. Red, yellow, purple, and, indeed, any variety of colored inks may be easily produced, and have been used. In all these the coloring matter desired is held in suspension by thickening the liquid with gum-arabic.

OLMSTED'S SPRING-TOP OILER.

It is frequently necessary to eject oil from an oiler



when the implement cannot reach the part to be lubricated. This is done by a sudden compression of the air in the can acting on the oil, which com-

pression is produced by diminishing the oil space by springing the top or bottom of the oiler inward. Such is the oiler represented in the engraving.

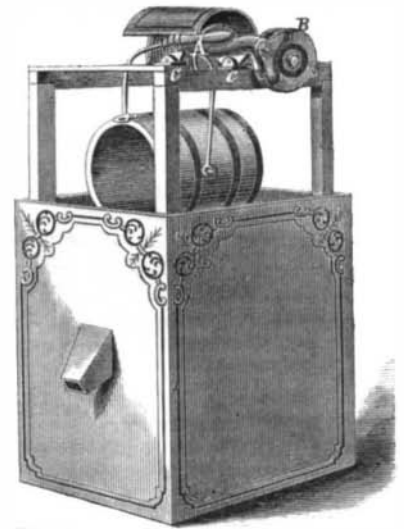
A is the body of the can, "struck up" from heavy sheet tin; B is the top, crowning at the center to allow free passage to the oil, and being a disk spring, which is operated by the collar, E, on the tube, D, that screws into the top, at C. To prevent the flexible top from being set, which is the main object of the improvement, a pipe, F, fits snugly into the discharge tube, having longitudinal slots in its sides

to allow the oil to pass freely, and its other end engages the stud of the weight, H. The pipe, F, is soldered to the inside of the screw, G, making this, usually the weakest part of an oiler, the strongest, as after the pipe reaches the top of the weight, H, no further pressure on the cover can depress it.

This device was patented through the Scientific American Patent Agency, May 1, 1866, by L. H. Olmsted, Stamford, Conn., to whom apply for additional particulars.

WATER ELEVATOR.

Notwithstanding the conveniences of pumps, by which water can be brought directly into the house from a well situated at a distance, the popular idea on this subject is well expressed in the song of "The Old Oaken Bucket."



The engraving shows a well curb and water elevator, which is easily operated, and having no springs or other attachments liable to get out of order, is durable and convenient. The crank, A, has a cam at the end opposite the handle, which bears against the periphery of a wheel inclosed in the box, B, so that when rotated to raise the bucket, it grips the wheel, which is a portion of the shaft carrying the rope wheel, and becomes a part of the shaft. To lower the bucket in the well, the arm of the crank is rested on one of the lugs, C, when the eccentric of the crank is released, and the drum allowed to revolve, sending the bucket down. The pressure on the crank can be regulated to permit the bucket to descend with greater or less velocity. A catch on the bucket rim engages a projection on the curb, tilting it for the delivery of the water when at the proper height.

Patented through the Scientific American Patent Agency Sept. 4, 1866, by Alfred Woodworth.

For further particulars address Alfred Woodworth, Cambridge or North White Creek N Y