New Inventions.

Improved Grease Faucet.

Mr. Robt. M. Wade, of Wadesville, Va., the ingenious gentleman who invented the improvement on Mill Bushes, which is illustrated on another page, has taken measures to secure a patent, for a valuable improvement on Grease Cocks for lubricating purposes. A cock is made with two plugs fitting in separate sockets at a distance apart, in the same tube or passage, with a chamber between them. The two cock plugs are so connected as to be turned by the same handle, and they have their passages so placed in relation to each other, that when one is open the other is always closed. This cock is attached to any part of a machine in which it is designed to operate in a similar manner to the kind in common use. When it is desired to fill the oil reservoir, the handle is turned so as to open the passage in the outer plug and close the inner one, but when it is desired to admit grease to the inside of the machine, cylinder, &c, the handle is turned so as to close the passage of the outer plug and open the inner one. The outer plug being closed, steam or vapor is prevented from escaping under pressure from within, while the inner one, being open, it allows the grease or oil to enter.

Improved Seed Drill.

Messrs. Newton Foster, Gilbert Jessup, H. L. Brown, and C. P. Brown, of Palmyria, New York, have taken measures to secure a patent for improvements in Cultivators, which improvements have been esteemed very valuable.

The head of the grain box is connected with the axletree by being formed in one casting, and the teeth of the drill (the seed tubes) are so arranged that they can be stopped at any angle, from a right angle to a parallel line with the draw bar. There is a revolving disc which has projections that take the seed from the seed channel and convey it uniformly equal into the seed tubes, which deposit the seeds in the furrows. This cultivator can be made much cheaper than some others which we have seen.

Improvement in Circular Sawing Machines.

Mr. Robert W. Parker, of Roxbury, Mass., has invented an improvement in driving circular saws, which is worthy of attention, as it is asserted that it obviates much of the friction attendant upon the ordinary modes of running such saws. By a peculiar arrangement of belts and pulley, Mr. Parker states that he can easily get, by hand power, 2,600 revolutions of a buzz saw per minute, cutting through a three inch plank in that period by the power of one man at the crank. We commend this improvement to all farmers who have their own firewood to cut, and joiners and carpenters should not look over it. Measures have been taken to secure a patent.

Improved Skiving Machine.

J. Warren, agent for the Wellingsley Machine Works, Plymouth, Mass., has invented a very simple and unique contrivance for splitting or skiving leather that obviates several disadvantages hitherto found in other machines for this purpose. The roller under which the leather passes during the operation of splitting, moves up and down in guides, and is operated by means of a strap connected to a cross bar underneath the platform upon which the cutters are arranged. The roller is held up by means of a spring, and does not swing on its axis like other machines now in use. Set screws are arranged in the top cross standard, by means of which the roller is regulated to the width of the leather to be split.

Improved Clamp.

Mr. George T. McLauthlin, of Plymouth, Mass., has made a valuable improvement in shoe and harness makers clamps. The table is supported by a hollow cast iron standard, and the clamping jaw works upon a centre connected to the treadle, by a strong wire which passes obliquely through the standard. A strong spring is employed to hold the clamps firm while in or out of use. The whole arrangement is more convenient than any we have ever seen, and we have no doubt it will come into general use. The inventor is largely engaged in the manufacture of shoemakers' tools, and furnishes an excellent article. He has made an application for a patent.

Machine for Making Paper Bags.

Another convenience and accommodation is preparing for our grocers, apothecaries, confectioners, seedmen, &c. &c., in the article of paper bags. Francis Wolle, of Bethlehem, Pa., we are informed, has invented and is about putting in operation a machine for making this article of every size and quality, to be sold at but a small advance on the cost of the paper. The operation which was so long an irksome and annoying task—the drudge of the shop boys—is now made simple and pleasant. While one is at the crank turning and another is spreading out the sheets at one end of the machine, the bags are dropped and placed upon files, cut, folded, pasted, and lapped, all ready for use, at the other end.

BROWN'S PREMIUM WINDOW SASH BALANCE.

Figure 1.

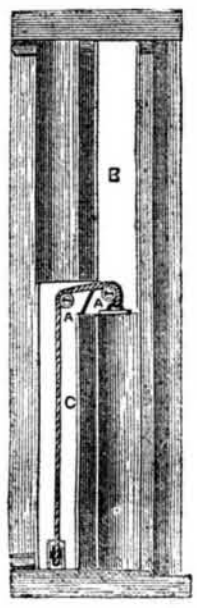


Figure 2.

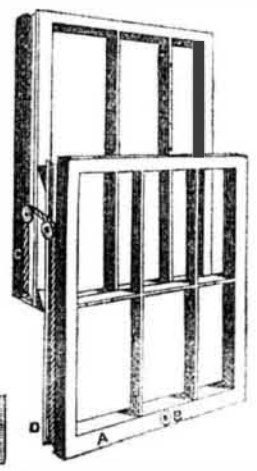
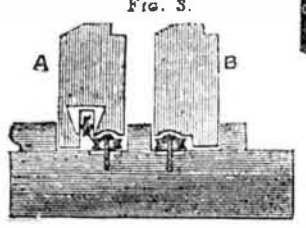


FIG. 3.



The accompanying engravings illustrate an invention of Mr. H. C. Brown, of Xenia, Green Co., Ohio, secured by patent to him. It is a substitute for box frames, and weights of windows, and is applicable to frames now in use.

Figure 1 is a view of the face of one of the window jambs, the light parts representing the edge of the sash. A A are two small pulleys screwed to the jamb opposite the ends of the meeting rails of the sash, to which the sashes are suspended, also the pulley contained in the small triangular case at the bottom corner of the bottom sash. Figure 2 shows the position of the sash when partially opened: the small circle at B, in the bottom rail of the sash, is an enclosed axle within a case upon which the cord is wound to raise either or both of the sashes, and from off which the cord is to be unwound in lowering either one or both of the sashes. The sashes are held at any height desired by a lock pin dropping upon a ratchet wheel on the axle within the case, from the top edge of the bottom rail of the sash; one end of the cord is fastened to the bottom corner of the top sash on one side, and passes immediately over the pulleys, and down the bottom sash stile, running over the friction roller at the bottom corner, along in a groove, and through the axle at B, and passes on in like manner up the other side of the window, the end of the cord being fastened to the top sash as at the first end.

Figure 3 is a cross section of the jamb and sash stiles of one side of the window, showing the pulleys as screwed to the jamb, and the manner of rabeting the sash to pass up and down over the pulleys; also the manner of setting in the friction roller at the bottom corner of the sash.

Figure 4 is a face view of a large pulley

Figure 4.

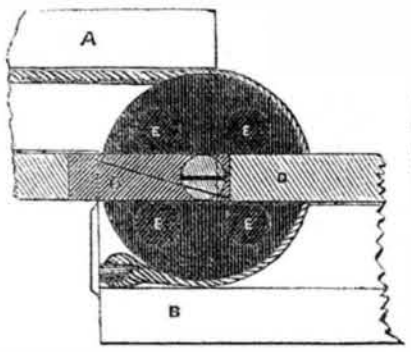
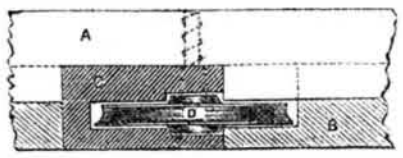


Figure 5.



substituted for the small one in large and heavy windows; also a portion of each sash when the window is closed. C is the front portion of the iron frame containing the pulley. The sashes are rabeted in like manner as for the small pullies, except the hollow for passing over the screw heads.

Figure 5 is an edge view of a portion of the frame and the pulley; C is the pulley frame.

FIG. 6.

A large heavy screw is driven though th frame and pulley into the window jamb as an axle for the pulley to run on.

Figure 6 is a view of the bottom edge of the lower sash rail containing the case and its axle, also the triangular cases and their friction rollers at the corners. The shaded part represents the shape of the groove that is necessary for the winding of the cord on the axle; by allowing sufficient length of cord the top sash may be let a part or all the way down at pleasure; in order to wind or unwind the cord, a small crank handle is inserted in the barrel of the axle, and turned as in winding a clock; thus any person can always run the sash as desired, without ever reaching higher than the bottom rail.

Any common window, already in use, may be hung on this principle at a much less cost than hanging with weights, and much neater, as the cord and pullies are always out of sight and never appear to view in any portion of the sash.

This Sash Balance of Mr. Brown has received very high commendations from architects and others, who have seen it applied and used, and who are well qualified to judge of its merits. Mr. Rogers, an eminent architect in our Western States, has spoken of it in the most favorable terms. Wherever it has been put up and used, it has won the good opinion of all who have seen it, and to us it appears to be really a good invention.

For further particulars about rights, &c., we refer to an advertisement on our advertising page.

Improvement in Thimbles and Scissors.

We learn by the London Patent Journal that a Mr. Charles Marsden, of London, has taken out a patent for an improvement in thimbles and scissors, which is worthy of attention. He makes his thimbles ventilating, so as to permit the free escape of perspiration. There is a metal lining within the large cylinder of the thimble, and this is perforated and attached by metal points to the outside one; this allows the perspiration to pass up out of the thimble.

In cutting with scissors, it is necessary, in order to keep the cutting edges in contact, to give them a side twist, which not only inflicts injury on the fingers but precludes the use of them with both hands. One of the bowl arms, with a vertical projecting arm which presses on the other arm, gives a permanent side pressure to the blades, ensuring proper contact of the cutting edges without effort of the user; this also ensures a good cutting edge from end to end of the blades. Small instruments are liable to be overlooked now-a-days as too insignificant for improving or patenting, but they are the very kind of patents that pay best, and these improvements on the scissors and thimble are very valuable, indeed they are exceedingly useful. While we wear coats and pants, we respect the genius that does not overlook improving the instruments which make them. The ladies, too, will bless Mr. Marsden for his improved thimble.

Gold Washing Machines.

The discovery of gold in California has developed no small amount of mechanical genius in our people. We have counted no less than thirty different kinds of washing machines, every one promising to be better than its neighbor; but it seems that very few, if any, have become popular with the miners, or even fit to use. Machinery to be of any utility must be adapted to circumstances, and it takes practice to invent the proper means to meet the required ends.

It seems that various machines were invented in the gold regions, all of them bearing peculiar names, such as "Long Tom," "The Jack," "The Cradle," "Rocker," &c. The latest invention, and the one said to be the best, are the "Sluice Boxes." These consist of a series of boxes, 10 to 12 inches broad at the bottom, 6 high, and open at the top like the "Tom." They are usually from 30 to 60 feet long, sometimes longer, with low rifle cleets set along the bottom at long intervals, and at an inclination which will give a very strong current to the stream of water which is passed through it. The dirt is then simply shovelled into the boxes at intervals along the upper part, the force of the current driving off both the earth and smaller stones, leaving the gold behind. In this way vast quantities of earth may be washed. Dirt which will not pay more than two dollars to the hand with the rocker, will yield, where it can be readily obtained from 12 to 16 dollars by sluicing.

The Sacramento Transcript says, that the miners will make $80, per day, with the "sluice boxes," when they could not make over $10 with the "Rocker."

Revolver Shirt.

An article called the revolver shirt has been made in France. Punch has several jokes concerning it. It is so made that by turning round a little to the right or left, it is made to display, in succession, the following round of fronts, viz.: first, a colored front; second, a plain front; third, a dress front; fourth, a dishabille front, thus combining four shirts in one.

Corn Sheller Model

A gentleman from the West left with us the model of a corn sheller a few weeks since. It is so much broken that we have been unable to get any idea of its operation, and shall before deciding upon its novelty, require a sketch and description of its construction.