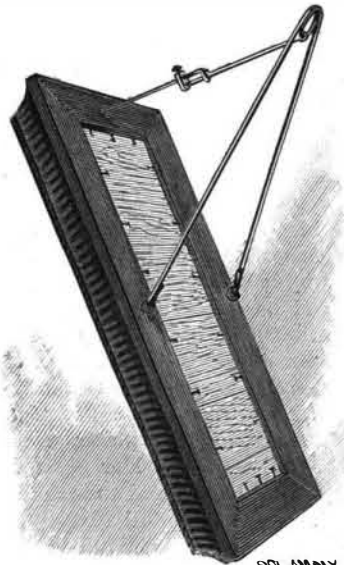


**PICTURE FRAME ATTACHMENT.**

This simple and efficient device is for suspending picture frames and mirrors at a fixed angle against the wall. The ends of the holding wire are bent into the form of hooks,



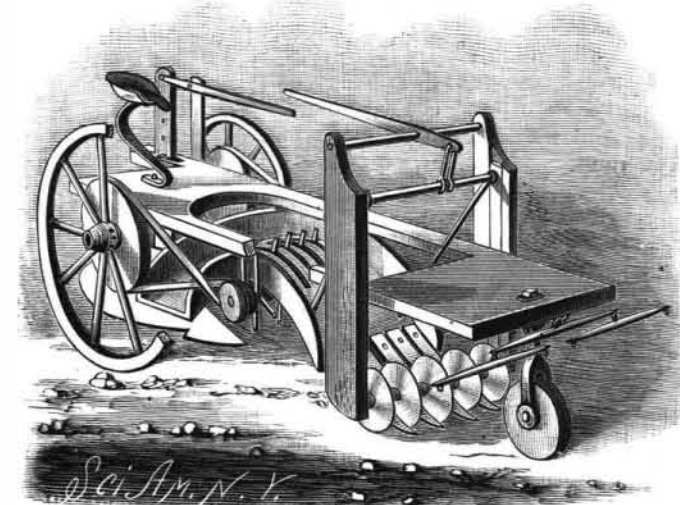
which engage with screw eyes inserted in the back of the frame. The middle of the wire is bent to form a spiral loop, upon which is received an eye formed on the end of a wire, provided at its free end with a slide having a set screw. Through a hole in the slide passes a wire having a loop bent at right angles at one end, and encircling the main wire. The

opposite end of the wire is pointed, so that it will retain its position when brought into engagement with the back of the frame. In order not to injure the frame, the pointed end may be replaced by a rubber pad to bear against the frame. It is evident that by means of this device, the frame may be placed at any desired inclination in regard to the surface against which it rests.

This invention has been patented by Messrs. M. A. Gerber & E. J. Nicholas, of Lost Creek, Pa.

**COMBINED PULVERIZER AND PLOW.**

This combined pulverizer and plow is so designed as to cut the furrow slices into strips, pulverize them, and then turn them under. The forward end of the frame



**EVANS' COMBINED PULVERIZER AND PLOW.**

is supported by a wheel, and the rear part is attached to the axle of the driving wheels. To the opposite side of the forward part of the frame are attached wide standards, in the inner sides of which are vertical grooves, in which slide bars carrying the ends of a shaft upon which are placed loose circular colters which, as the machine is drawn forward, cut the furrow slice into narrow strips. Between the lower parts of the colters are placed the points of narrow, slightly curved plows, whose shanks are attached to the forward end of an arched trough, so that the narrow strips of the slice will pass through the trough and fall in front of the turn plow, which can be adjusted so as to govern the depth to which it enters the ground. By means of a suitably arranged lever, the forward end of the trough, the narrow plows, and the circular colters can be raised by one movement. The arched middle part of the trough has slots formed in it in line with the plows, to receive the fingers attached to a cylinder revolved by endless bands passing around pulleys on the drive wheels. These fingers move much faster than the strips of the furrow slice through the trough, so that they will tear in pieces and pulverize the strips. With this construction the furrow slice will be cut into strips, pulverized, and deposited in front of the plow, which will then turn it under. This invention has been patented by Mr. Daniel W. Evans, of Sherman, Ohio.

SOMEBODY has compared the world to a beehive. The empty comb represents the possibilities of life, which may be filled with honey or stuffed with bee bread; and as in gathering honey the bee uses the sting as a spatula, and mingles a portion of its sting poison with the sweet for the sake of preserving it, so the wealth which the human bee accumulates lasts all the better when deposited little at a time at an expense of much care and labor.

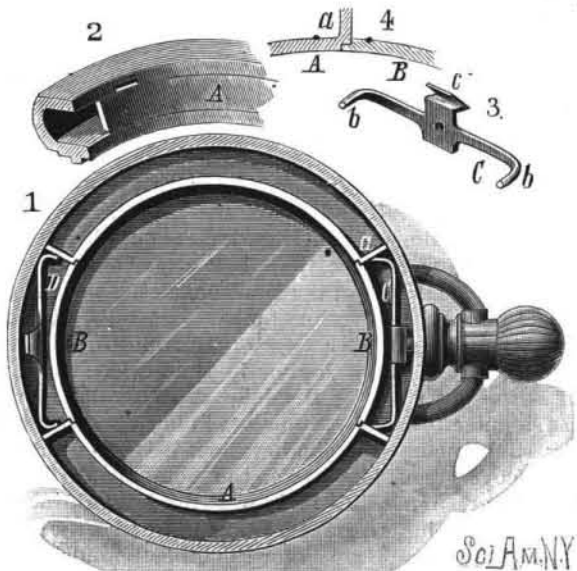
**Creeping of Varnish.**

We often meet with this trouble, especially in light colored gears, where oil has been used in the colors, and in almost every case where oil and varnish are combined in the varnish and color. One way to get over the difficulty is to give the job two coats of the true color, and then a light coat of pure varnish without any in; but when you cannot take the time for that, and are compelled to have your varnish and color strong, you can adopt the following two plans, which we have found have answered the purpose. As creeping is caused principally by sweating, which throws off from it instead of attracting to it, we must try and get rid of that false tack, which is nothing but a thin crust of oil held in its place by the other ingredients in the color, just as gold sizing standing over night exposed to sulphur from the stove will have a thin coating of sulphur; and although you might lay the gold on, and to all appearance it would be all right, yet if you attempted to wash it off, you would find it would leave solidly.

The oil in the color acts in conjunction with the varnish just the same; the oil, being lighter in body than the varnish, rises to the surface, and, although seemingly hard, has that false gloss and tack which must be taken away before you can proceed. Where you cannot with safety rub it off, without running the risk of marring the looks of the job, take castile soap, and, instead of rubbing it, wash it. It is best, if you can, to take each part separate, except when you are varnishing, which in that case involves the washing of the whole job at once. You should always wipe off with a medium damp chamois skin, one not too dry, so as to retain enough dampness to insure safety. Even after you have gone through the above, if, after all your trouble, you still find places that have probably been missed or slighted in the washing, and detect the creeping, just throw a little pure water into your varnish, stir up thoroughly, and proceed just as you would if you had no trouble. Sometimes the creeping will occur in spots, and can, in striping, be stopped by breathing heavily upon the place, running over it at once with the stripe.—*Carriage Monthly.*

**IMPROVED SPRING AND DUST GUARD FOR WATCH CASES.**

The object of this invention, which has been patented by Mr. Robert L. Stufft, of Scottdale, Pa., is to provide for watch cases a dust guard which may be readily applied and removed, and which will support the lifting and catch springs. The strips, A, forming the side pieces of the guard, are of sufficient width to fit into the band of the case, and their ends, a, are bent outward and fitted into the space in the central part of the watch case body. Between the ends are fitted the curved strips, B, which complete the metallic circle around the movement. In the chamber opposite the pendant is fitted a flat spring, C, having its ends, b, turned backward and resting against the ends, a, of the strips, A. Upon the middle of the spring is formed a catch, c, which engages with the rim of the cover. This spring is acted on by the push pin in the usual way. In the chamber in the opposite side of the case is a flat spring, D, provided with a curved arm which engages the shoulder of the case cover. The springs are light, easily applied, and readily replaced in case of breakage, it being only necessary to remove one of the curved strips, B, to gain access to the chamber. The sections of the dust guard, being closely fitted and pressed into place between the flanges of the center ring of the case, afford a strong protection, and add to the stiffness and strength of that part of the case. The sections can be removed by inserting an edged tool in a small opening arranged as shown in Fig. 2.



**STUFFT'S IMPROVED SPRING AND DUST GUARD FOR WATCH CASES.**

**FOLDING STEP LADDER.**

The accompanying cut represents a folding step ladder, opened and closed, made of hard wood and ingeniously bolted and braced in such a manner as to form a strong, complete, useful, and handy ladder.

When folded it occupies a space of only four inches, so that it may be put in the pantry or behind any door where it will be out of the way, and yet be within convenient reach, thus saving the trouble of searching the cellar and garret, and perhaps finding the ladder in the yard in a condition unfit to be brought in the house. This compactness is of advantage to dealers, owing to the small amount of space occupied and the low cost of transportation. When used by painters, it can

**RUSSELL'S FOLDING STEP LADDER.**

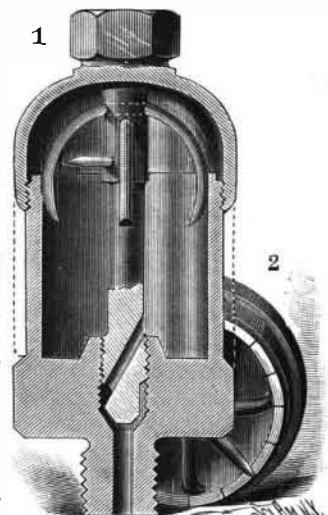
easily be carried under the arm, and for use as an article of household furniture it can be converted into a very neat hall rack.

This invention has been patented by Mr. H. C. Russell, of 240 Robert Street, Toronto, Canada.

**IMPROVED OIL CUP.**

This oil cup may be applied to the journal bearings and moving parts of machinery, but is especially adapted to the lubrication of the rod and wrist pin connections of locomotive and other engines. It can be easily adjusted to regulate the feed of oil. The body of the cup is chambered to receive the oil, and has a neck by which it may be attached to the bearing. At the bottom of a central hole in the base is a tapering seat, below which is a passage through which the oil flows. The hole is threaded to receive the lower end of a spindle, which is beveled to fit the seat. The upper end of the spindle is steadied by bent arms or elastic wires, which bear against the inner part of the body.

The end of the spindle has an oblique passage which communicates with the oil chamber and with the hole, the threads on the spindle below the opening being cut away, to allow the oil to escape freely. Fixed to the spindle is an index finger, or pointer, which indicates on a graduated scale, on top of the oil cup body, the extent of opening of the spindle at the seat. A recess around the bottom of the chamber forms a pocket to hold sediment and prevent its passage to the parts to be oiled. When the cup is used on a wrist pin, it is provided with a screw cap fitting air tight, the bodily swing of the cup then insuring proper feed of the oil. When the cup is used on stationary bearings, it is fitted with a slip cap or cover, having a vent hole to insure flow of the lubricant. It is obvious that the cap can be removed to replenish the oil or clean the cup without altering the adjustment of the spindle, while the index finger and scale provide for almost instantly resetting the spindle to continue the same feed of oil, should the spindle be removed for any purpose.



This invention has been patented by Mr. Herman A. Todd, of Evanston, Wyoming.

A SCIENTIFIC FISH STORY.—An Italian has discovered that fishes are fond of music. To one Signor Garetto the honor of the discovery is said to be due; and recently, with a party of friends, he is said to have tried the experiment on Lake Geneva, which proved quite successful. Musical notes, especially those produced by the human voice, attracted the fishes in great numbers around the boat. Fishermen should try the experiment.