

IMPROVED PICKET FENCE.

In many sections of the country, and especially upon the prairies of the West, it is difficult to obtain long fencing timber, and hence the expense of building and maintaining proper fences constitutes no small item in the farmer's expenses.

The invention which is represented in our engraving is a novel construction of fence, which may be made of proper rails, short split timber, small poles, limbs of trees, and similar rough wood, very readily by any one at all skilled in ordinary farming operations. It is composed of two sizes of posts, the shorter ones, A, Fig. 1, resting upon the ground, and the longer ones, B, ranged at intervals, connecting at their upper ends with a straight line of wire. The latter is extended between fixed posts, C, which are driven in or firmly anchored to the ground, as shown in the engraving, and located some fifty yards apart. The posts, long and short, are arranged in panels and connected together by fence wire, woven in between them. They brace in alternate directions, thus giving the fence a zig-zag base (Fig. 2) and straight top, the former giving it sufficient stability to resist wind as well as forcing by stock and currents of water.

The inventor proposes to make the longer pickets six feet apart at the top and seven feet apart at the bottom, which will give the fence a proper base when set up, but when stretched flat upon the ground will render it circular in form. The panels may then be rolled into bundles and transported like bales of cotton or similar packed material. One hundred feet of fence, it is stated, will weigh about five hundred pounds. The material suitable for the purpose, we are assured, need not cost over one fourth that of the common rail fence, and the wire is worth about fifty cents per rod.

Patented through the Scientific American Patent Agency, October 14, 1873. For further particulars relative to purchase of rights, etc., address the inventor, Mr. R. H. McGinty, Moulton, Lavaca county, Texas.

IMPROVED WORK HOLDER FOR LATHES.

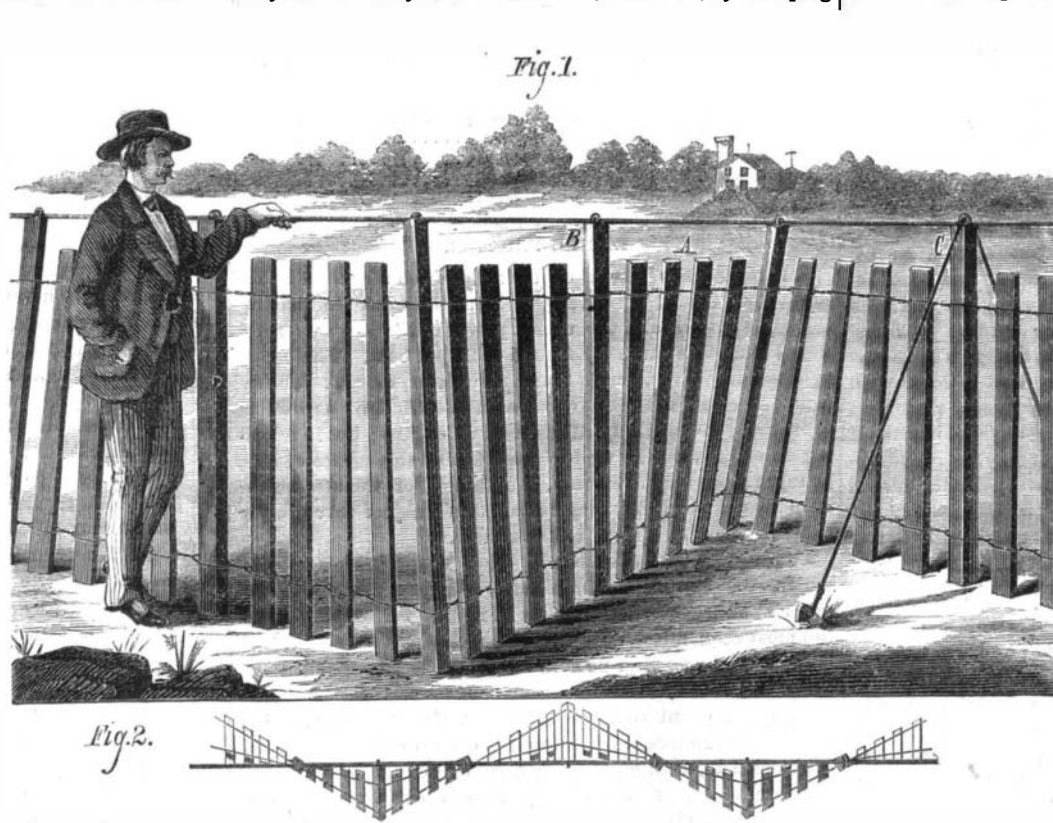
There are few mechanics accustomed to using the lathe who will not recognize at a glance the utility and convenience of the ingenious attachment to that tool, represented in the annexed engravings. Its object is to hold small articles in the lathe while being acted upon by a revolving cutter turning upon centers; and it is secured to the carriage in the same manner as the ordinary cutting instruments. The inventor does not aim to supersede the expensive shaping machines common in use in large shops, but offers an apparatus, the cost of which will be within the means of every mechanic, and which may form a handy substitute for the more cumbersome contrivances devised to perform in a lathe the work of milling machine and planer on a reduced scale. The device is adapted to fluting taps, slabbing studs, nicking screws, and other similar work, in great variety; and by the aid of gear-cutting attachments, gears, circular cutters, and the like may be formed.

The three combinations of the invention are shown in our engraving. In Fig. 1 the work is so held as to extend across the bed of the lathe at right angles to the arbor. In Fig. 2 the cutter acts perpendicularly downwards, as in the case of nicking the screw head shown, while in Fig. 3 the axis of the article under operation is parallel to that of the lathe. A, in all the figures, is the bar, which is clamped in the ordinary manner in the tool post. B is the clamping band which secures the tool. These parts remain the same in all the adjustments of the instrument, the only portion changed being the jaw, C, and its arm, D, in manner and

for the purposes below set forth. The bar, A, is provided at one end with a vertical groove, E, Fig. 1, in which slides a tongue formed on the arm, D. The top of the latter is turned over the portion just described, and is provided with a screw, F (all figures), which turns down upon the top of the bar. G is another screw bolt which passes through a slot in the end of the bar, A, and enters the jaw, C, holding the tongue of the latter in the groove, and sliding up and down in its slot. It will be seen that, by loosening the screw, G, the jaw, C, may be set at any desired elevation, and then, by clamping

upon the bar, A. The lower part of the band, B, is enlarged so as to permit the insertion of larger articles than would the portion sliding upon the jaw, C, and is strengthened by the rib, I.

By examining the three engravings, the reader will understand that the difference in the form of the instrument lies simply in the construction of the jaw, C, and arm, D, necessitating three separate pieces, either of which may be used in connection with the bar and clamp, according to the kind of work to be operated upon.



McGINTY'S PICKET FENCE.

said screw, be nicely adjusted by a screw, F, which also serves to secure it at a given point. The screws are turned by the wrench shown, which fits all the heads. The clamping band, B, also has a screw, H, passing down through its top and pressing upon the jaw, C, so as to draw up the lower inside end of the band toward the under side of the jaw, and hold firmly articles inserted between them while being acted upon by the revolving cutter, as shown in Fig. 1. The extent of the operation is regulated by the movement of the tool carriage, and the sliding arrangement of the jaw, C,

various other expositions throughout the country.

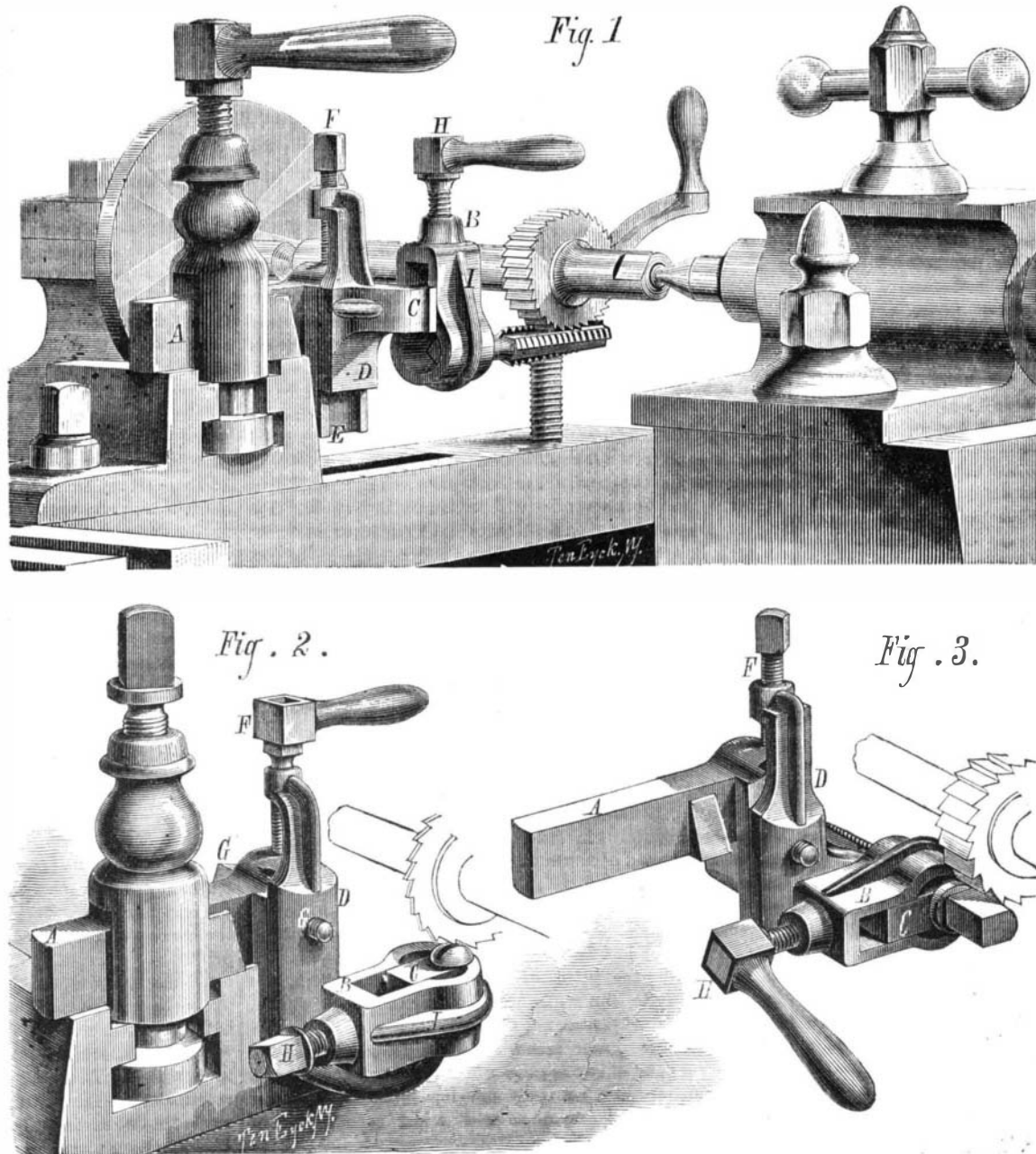
Patented October 22 and December 31, 1872. For further particulars address the inventor, Mr. William P. Hopkins, Lawrence, Mass.]

Iceland's Millennial.

Perhaps no country more uninteresting than Iceland exists in the world. Situated in a high northern latitude, at about 160 miles from the Greenland coast, it is little more than a mass of volcanic rock which natural convulsions have upheaved into mountain ranges. The inhabitants, however, are a cultivated and refined race, and strongly devoted to educational pursuits. Libraries exist in considerable numbers, and are connected with every church.

Just ten centuries have now elapsed since the island was settled by Europeans; and Iceland proposes, during the coming summer, to celebrate her millennial birthday by a grand meeting on the plain of Thingvalla, near Reykjavik, the capital city. The object is not only to commemorate the lapse of a thousand years of national existence, but also the granting of a new constitution by Denmark, in which the independence of the island is guaranteed; and it is intended to devote such proceeds as the affair may yield to the enrichment of the national library. Messrs. Longfellow and George W. Curtis have recently suggested that a gift of books from the American people would be a very appropriate contribution; and it is announced that all who may desire to send volumes can have them transported by the Geographical Society, Cooper Union Building, in this city, or the Pennsylvania Historical Society, Philadelphia, Pa.

A COMPOSITION FOR COVERING HOUSE ROOFS.—Take one measure of fine sand, two of sifted wood ashes, and three of lime, ground up with oil. Mix thoroughly and lay on, with a painter's brush, first a thin coat, and then a thick one. This composition is not only cheap, but it resists fire well.



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