

UNITED STATES - PATENT OFFICE.

JOHN ALBERT HALE, OF ROCKVILLE, INDIANA.

SAW-HANDLE CLAMP.

SPECIFICATION forming part of Letters Patent No. 698,936, dated April 29, 1902.

Application filed August 20, 1901. Serial No. 72,689. (No model.)

To all whom it may concern:

Be it known that I, JOHN ALBERT HALE, a citizen of the United States, and a resident of Rockville, in the county of Parke and State of Indiana, have invented a new and Improved Saw-Handle Clamp, of which the following is a full, clear, and exact description.

This invention relates to a class of handles that are attachable to the ends of hand-operated crosscut or ripping saws, and has for its object to provide a novel device of the indicated character which is very simple, is readily attachable or removable from the saw-blade, and which will reliably hold the saw-blade in connection with the handles.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the improvement applied upon one end of a saw-blade. Fig. 2 is a plan view of the device holding a saw-blade and handle therefor, the handle being in section; and Fig. 3 is a longitudinal sectional view showing the clamping device adjusted to release the saw-blade.

The saw-blade 10 may have any preferred form of teeth, and near each end thereof the teeth *a* are dispensed with, affording a stub end at each extremity of the saw-blade for engagement of the novel handle-securing devices. The saw-handle clamps for each end of the saw-blade being similar, the illustration and description of one of said devices will serve for both, and, as shown, comprises the following details:

Two clamping-jaws 11 12 are provided, which are perforated near their centers in alinement, these transverse holes receiving the bolt 13, having a head 13^a on one end and a nut 13^b on the opposite end. Each jaw 11 12 at the front of the cross-bolt 13 is grooved, as at *b*, vertically, these similar semicircular grooves together affording a channel for reception of a shank portion of the handle-bar 14, that is thus held upright for manipulation. Equal shoulders *b'* are formed immediately forward of the grooves *b* by an equal

reduction in thickness of the jaws in the portions that extend away from the shoulders *b'*. Upon the outer side of the jaw 12 a cam-shoulder *c* is formed, which is of greatest projection at the upper edge of the jaw 12 and thence gradually diminishes as it curves down toward the lower edge thereof.

A cam-lever 15, having a cam-head 15^a on one end, is mounted upon the bolt 13, the perforation in the cam-head being eccentric to its edge, and, as shown, the body of the cam-head is given wedge shape, the thickest edge of which is farthest removed from the perforation of the cam-head.

The inner surfaces of the opposite end portions of the jaws 11 12 are sloped from the bolt-holes therein to the ends of the jaws, as shown at *d*, and as the bolt 13 fits loosely in the holes it is inserted in the jaws and permitted to rock on it, so as to spread them apart in advance of the shoulders *b'*. Upon the forward inner surface of the jaw 11 two studs *e* are projected therefrom and spaced apart transversely.

There are mating sockets *e'* formed in the jaw 12 oppositely from the studs *e*, and the latter may enter their ends within said sockets when the jaws are rocked toward each other at their forward ends.

In the stub end of the saw 10, which is to be clamped by the device just described, two perforations *e'* are formed, which will receive the studs *e*, this engagement of parts being readily effected if the cam-lever is adjusted so as to remove the cam-swell on its head from the cam-shoulder *c*, as indicated in Fig. 3.

It will be seen that if the jaw 12 is rocked on the bolt 13, so as to clamp the stub end of the saw between the portions of the jaws 11 12, which are extended forwardly of the shoulders *b'* after insertion of the studs *e* into the perforations *e'*, this clamping adjustment may be enforced and rendered reliable by rocking the cam-lever 15 into the position shown in Figs. 1 and 2, which will dispose the thicker portion of the cam-head 15^a in contact with the cam-shoulder *c*, and the bearing of the cam-head thereon will obviously pull upon the bolt 13, so as to clamp the saw between the jaws.

The provision of the nut enables the adjustment of the jaws 11 12 and lever 15 rela-

tively to each other, so that wear of the cam-head 15^a and cam-shoulder c may be compensated for in an obvious manner.

Having fully described my invention, I
5 claim as new and desire to secure by Letters Patent—

1. A saw-handle clamp, comprising two
jaws, a bolt rockably connecting said jaws, a
cam-lever adapted to draw opposed ends of
10 the jaws toward each other, and a handle-bar
clamped between the jaws.

2. A saw-handle clamp, comprising two
jaws, a bolt rockably connecting said jaws, a
cam-shoulder projecting from the outer side
15 of one jaw, a cam-lever pivoted on the bolt
and adapted to press the cam-shoulder when
rocked toward it, and a handle-bar clamped
between the jaws.

3. A saw-handle clamp, comprising two

jaws adapted to receive the stub end of a saw- 20
blade between inner faces of their forward
ends, studs on one of said faces that may
pass through perforations, in the stub end, a
bolt rockably connecting said jaws, a cam-
shoulder projected from the outer side of one 25
jaw, a cam-lever pivoted on the bolt and
adapted to press the cam-shoulder when
rocked toward it, and a handle-bar clamped
in grooves oppositely formed in the jaws and
extended upright therefrom. 30

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN ALBERT HALE.

Witnesses:

HENRY DANIELS,
MONROE LANG.