T. H. SPURR & W. UPTON.

CROWBARS.

No. 195,412. Patented Sept. 18, 1877.

Fig. 1.

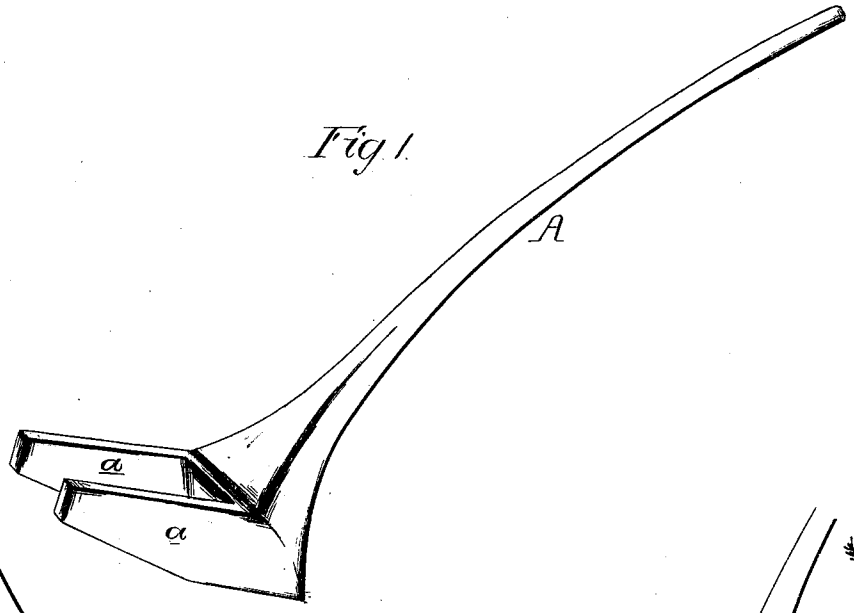


Fig. 2.

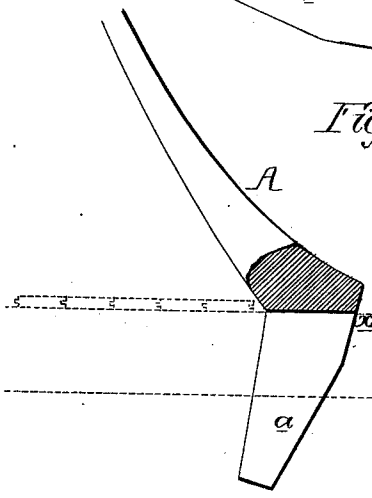


Fig. 3.

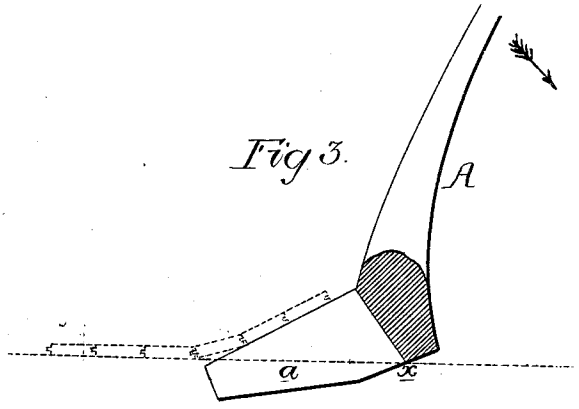
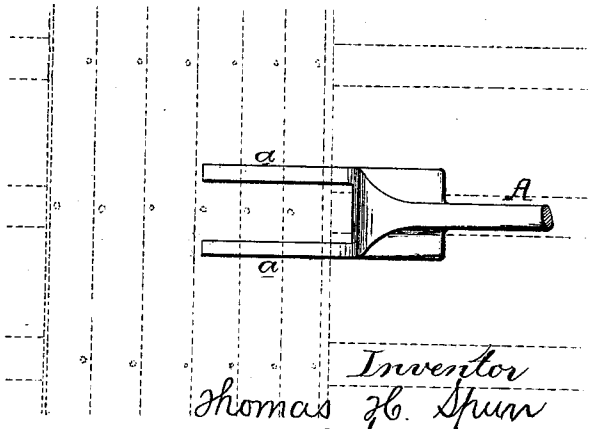


Fig. 4.



Witnesses
Richard L. Gardiner
Harry Smith.

Inventor
Thomas H. Spurr
and
William Upton
by their Attorneys
Howson and Howson

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS H. SPURR AND WILLIAM UPTON, OF PHILADELPHIA, PA.; SAID UPTON ASSIGNOR TO SAID SPURR.

IMPROVEMENT IN CROW-BARS.

Specification forming part of Letters Patent No. **195,412**, dated September 18, 1877; application filed March 7, 1877.

To all whom it may concern:

Be it known that we, THOMAS H. SPURR and WILLIAM UPTON, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Crow-Bars, of which the following is a specification:

The object of our invention is to construct a crow-bar for raising rails, tearing up flooring, boards, &c.—an object which we attain in the following manner, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of our improved crow-bar; Figs. 2 and 3, sectional views, showing the crow-bar applied to the purpose of tearing flooring-boards from joists; and Fig. 4 a plan view.

The stem or handle A of the crow-bar is enlarged at the lower end, and is forked, so as to present two arms, *a a*, arranged at an angle in respect to the stem, as best observed in Figs. 2 and 3.

In applying this implement to the tearing up of flooring-boards, to which it is especially adapted, that part of the stem A at the base of and between the arms *a a* rests upon the top of a joist adjacent to the flooring-boards, the arms *a a* projecting down on each side of the joist, as shown in Fig. 2.

Upon drawing the stem A in the direction of the arrow the bar will turn upon the point *x* as a fulcrum, the arms *a a* moving upward, and bearing against the under side of the boards of the flooring, and lifting them from the joist, as shown in Fig. 3.

It will be evident that, by simultaneously applying pressure to the boards on both sides of the joist, they can be lifted with much less effort, and the nails drawn from the joist more directly, than when a crow-bar of the usual form is employed.

It will also be seen that, owing to the form of the arms *a a* of the crow-bar, the angle assumed by the boards during the lifting operation is such a gradual one that there is no danger of breaking the tongued or grooved edges of the boards.

When our improved crow-bar is applied to the raising of railroad-rails the fulcrum *x* rests upon the cross-tie, and the arms *a a* act upon the rail on opposite sides of the said tie.

In the drawing the bar has an abrupt corner at the fulcrum; but it may be rounded at this point.

We claim as our invention—

The within-described crow-bar, bent and forked at the lower end, and adapted to be used as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS H. SPURR.
WILLIAM UPTON.

Witnesses:
JOHN K. RUPERTUS,
HARRY SMITH.