(Model.)

W. A. IRWIN.

COMBINED WRENCH AND STRETCHER.

No. 285,902. Patented Oct. 2, 1883.

Fig. 2.

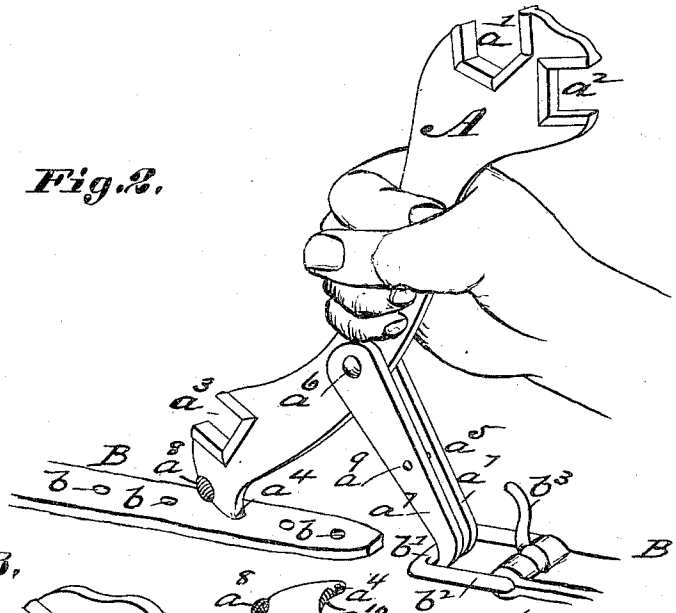


Fig. 3.

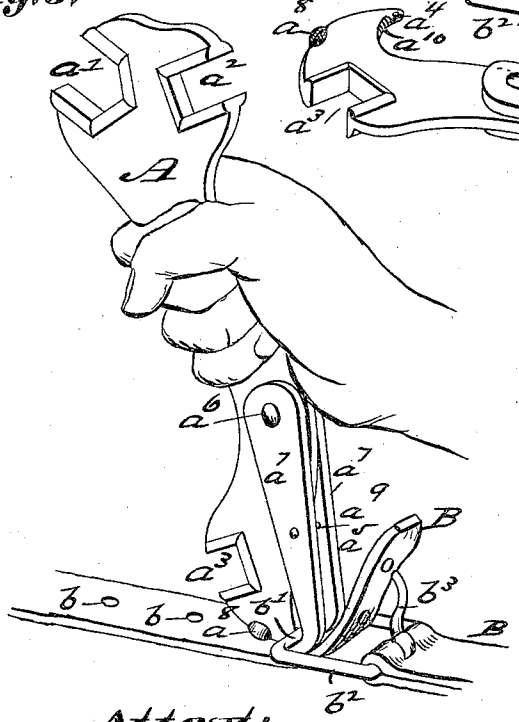


Fig. 1.

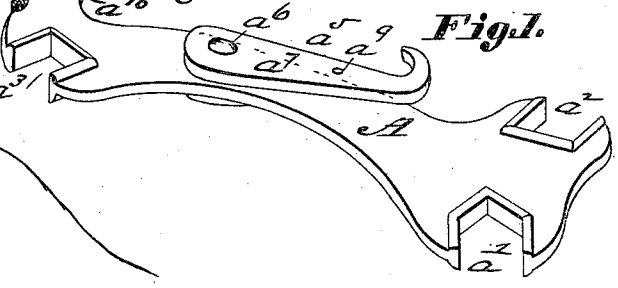
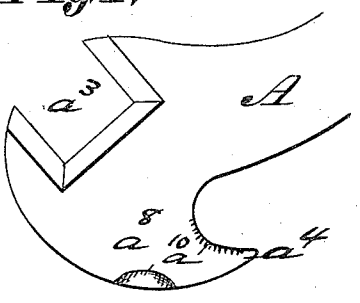


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM A. IRWIN, OF WEBSTER GROVE, MISSOURI.

COMBINED WRENCH AND STRETCHER.

SPECIFICATION forming part of Letters Patent No. 285,902, dated October 2, 1883.

Application filed June 12, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM A. IRWIN, of Webster Grove, Missouri, have invented a new and useful Combined Wrench and Stretcher, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view in perspective of the improvement; Fig. 2, a view showing the device as when a strap is about to be stretched; Fig. 3, a view showing the strap drawn up, and Fig. 4 a side elevation of one end of the device.

The same letters denote the same parts.

The improvement is serviceable in many places, but especially about a harvester.

The endless canvas apron employed in a harvester to elevate the grain, and which for that purpose is stretched around rollers upon the harvester, is often removed therefrom to protect it from the weather. To reattach the apron it must in practice be stretched with considerable force around the rollers, in order to bring the ends of the apron sufficiently near each other for the apron-straps to be buckled. This is a tedious operation, and to facilitate it is the principal aim of the improvement. An additional purpose is to provide a wrench adapted for turning such nuts and bolts as are used in a harvester.

The device consists of a wrench, A, of the form substantially as shown, having one or more jaws, a' a^2 a^3, of varying sizes, to enable the tool to be applied as a wrench, and also being extended at a^4 to form a point suitable for being inserted in the holes b b of a strap, B, as shown in Figs. 2, 3, and being provided with a hook, a^5, which is pivoted at a^6 to the wrench, and at its other end suitably shaped to hook onto the bar b' of the strap-buckle b^2, as shown. The hook is in two parts, a^7 a^7, preferably, which are spaced sufficiently apart to admit the buckle-tongue b^3 between them.

When the device is to be used as a wrench, the hook a^5 is turned back—say as shown in Fig. 1. To use it as a stretcher, the device is applied as shown in Fig. 2, in which case the point a^4 is inserted in the hole b and becomes the fulcrum upon which the wrench, as a lever, is turned in drawing the buckle toward the point a^4. To effect the operation the lever A is turned from the position shown in Fig. 2 into that of Fig. 3. This brings the buckle into position for the strap to be passed through it. To broaden the bearing of the wrench upon the strap, the wrench is provided with the lugs a^8 a^8. The bar a^9 prevents the hook from turning too far onto the wrench.

I claim—

1. The wrench A, having one or more jaws, a' a^2, &c., the point a^4, and the hook a^5, substantially as described.

2. The wrench A, having the point a^4 and the hook a^5, substantially as described.

Witness my hand this 5th day of June, 1883.

WILLIAM A. IRWIN.

Witnesses:
C. D. MOODY,
H. I. COE.