

# UNITED STATES PATENT OFFICE.

CHARLES GUDEHUS, OF HOBOKEN, NEW JERSEY.

## IMPROVEMENT IN SHEARS.

Specification forming part of Letters Patent No. 132,004, dated October 8, 1872.

*To all whom it may concern:*

Be it known that I, CHARLES GUDEHUS, of Hoboken, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Shears, of which the following is a specification:

My invention consists of a lever and spring combined with a shears in such manner that, as the blades close in cutting and the point of resistance shifts toward the points of the blades and increases by moving from the fulcrum, the force will be transmitted from the handle directly to or nearly to the point of the upper blade through the said lever and spring, so as to greatly lessen the labor of cutting through several layers of cloth. The arrangement is also such that, as soon as the force of the hand by which the blades are forced together is relaxed at the handles, the spring will throw the blades open again, and thus greatly relieve the hand of the operator of a difficult part of the labor.

Figure 1 is a plan view of a shears provided with my improvement, and Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

A is a small steel or other metal lever, pivoted at one end to the top of the thumb-piece or handle of the lower blade at C, and extending therefrom over and a little beyond the pivot or fulcrum pin D, which projects from one side suitably for supporting the said lever, and is provided with a small friction-roller. From the point where the lever rests on the fulcrum-pin when the shears are open the le-

ver curves downward to the end, to which a stiff spring, E, is pivoted at one end, the other end being pivoted to the upper edge, or thereabout, of the upper blade G, near the point. This bar and spring are enough longer between their connections with the upper handle and the upper blade to compel the blades to remain open in their normal condition, and, when the blades are closed, the shifting of lever and spring, or their three points of connection, into a right line, contracts the spring and causes the end connected to the blade G to force it downward. The contraction is greatly increased by the curvature of lever A at H, which, being drawn up over the fulcrum D, accelerates the contraction of the spring by bringing the joint I up toward the right line to which the other joints are at the same time approaching from above. Thus a direct downward pressure is transmitted from the handle B to the point of blade G, or nearly to it, which would otherwise be transmitted through the fulcrum D and blade G at a great disadvantage. As soon as the force is released from the handle the spring will relieve itself by throwing up blade G and opening the shears.

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

The combination, with a pair of shears, of a lever, A, and spring E, substantially in the manner described.

CHARLES GUDEHUS.

Witnesses:

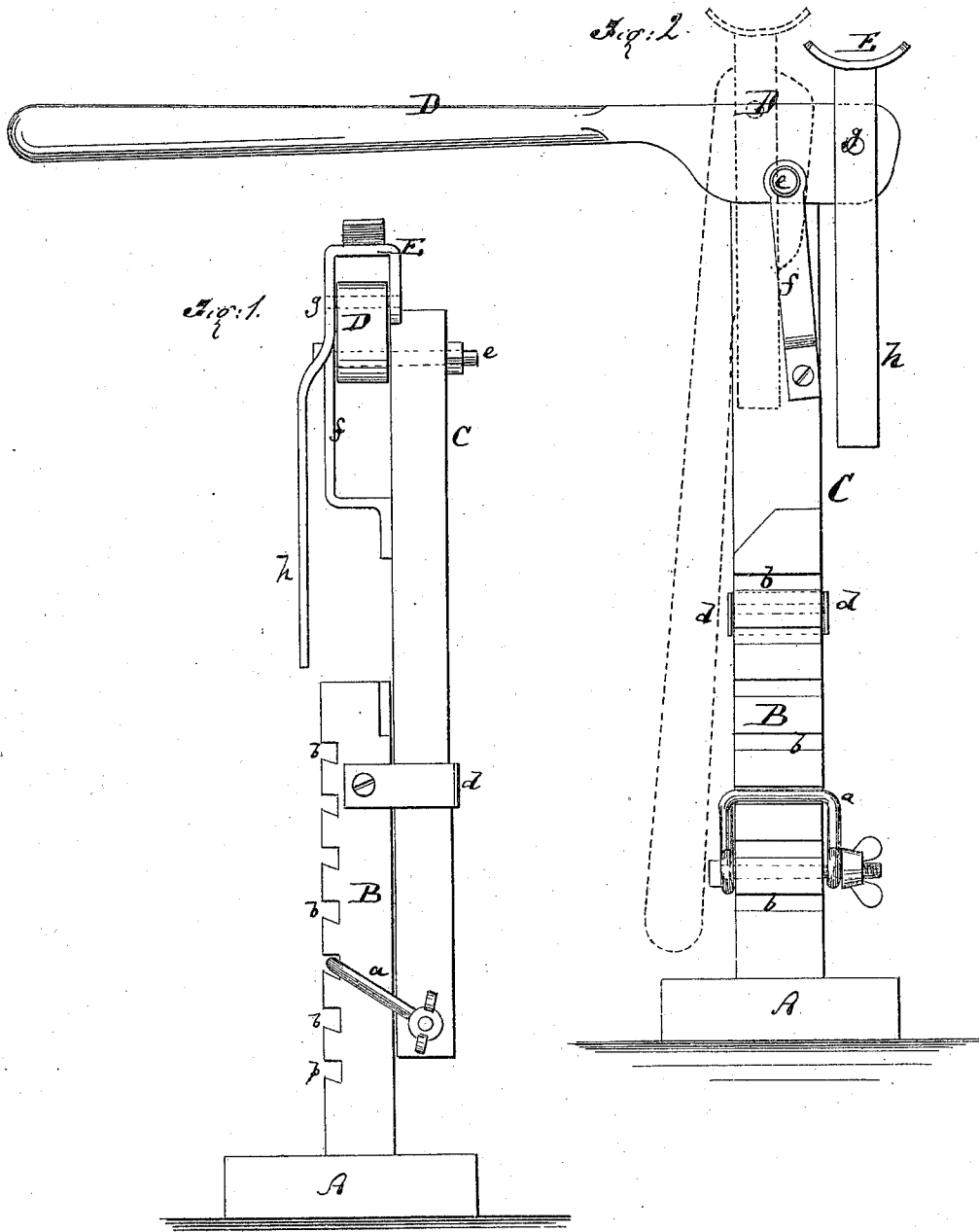
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Improvement in Wagon-Jack.

No. 132,005.

Patented Oct. 8, 1872.



Witnesses:

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