

(No Model.)

E. H. WATROUS.
METAL CUTTING SHEARS.

No. 370,295.

Patented Sept. 20, 1887.

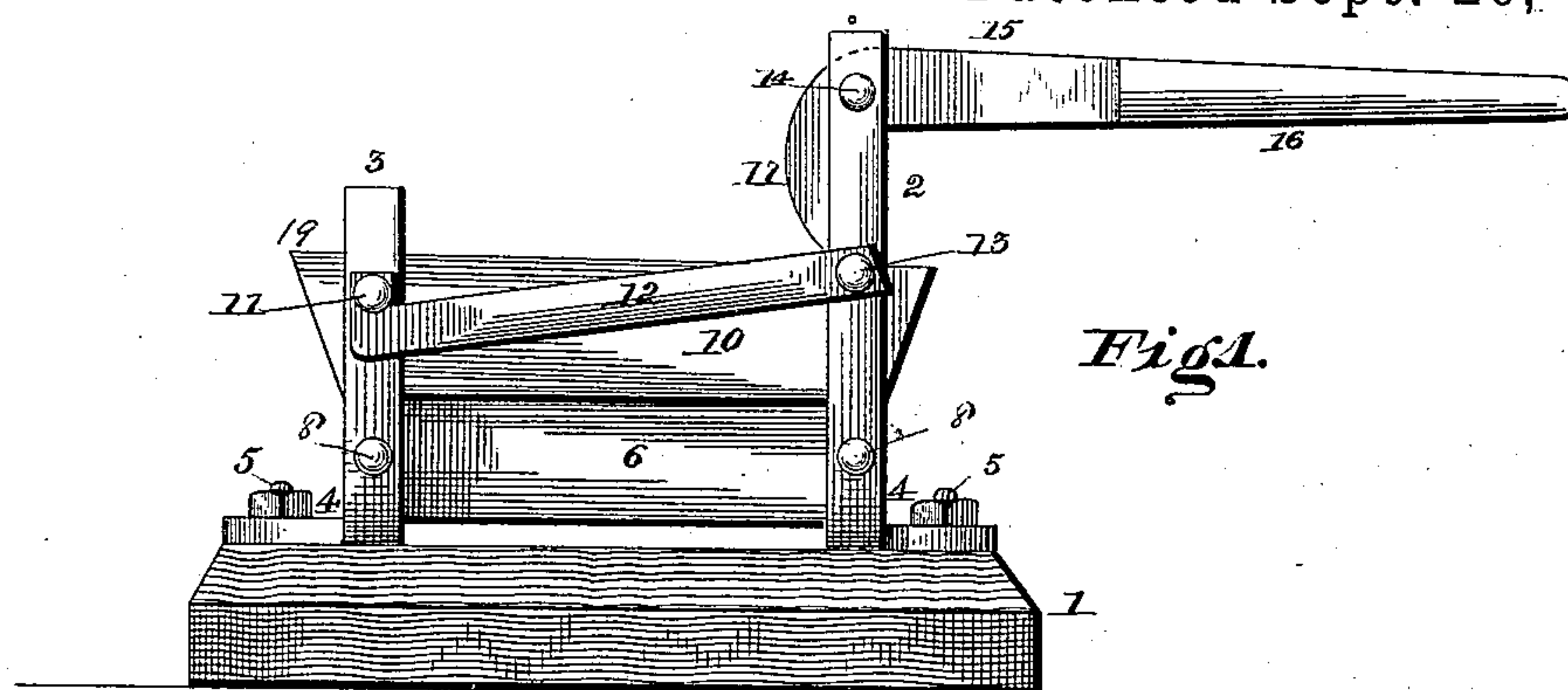


Fig. 1.

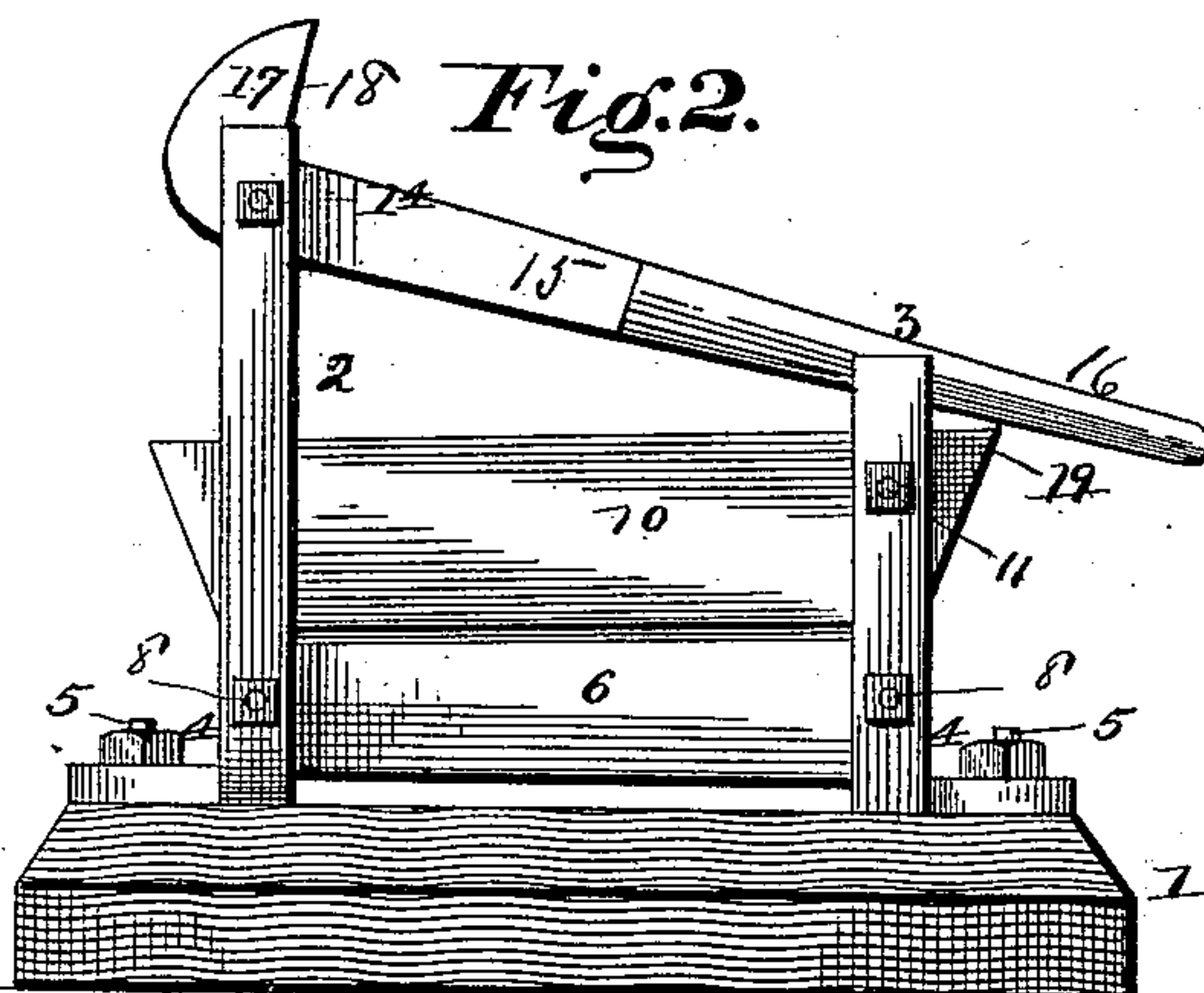


Fig. 2.

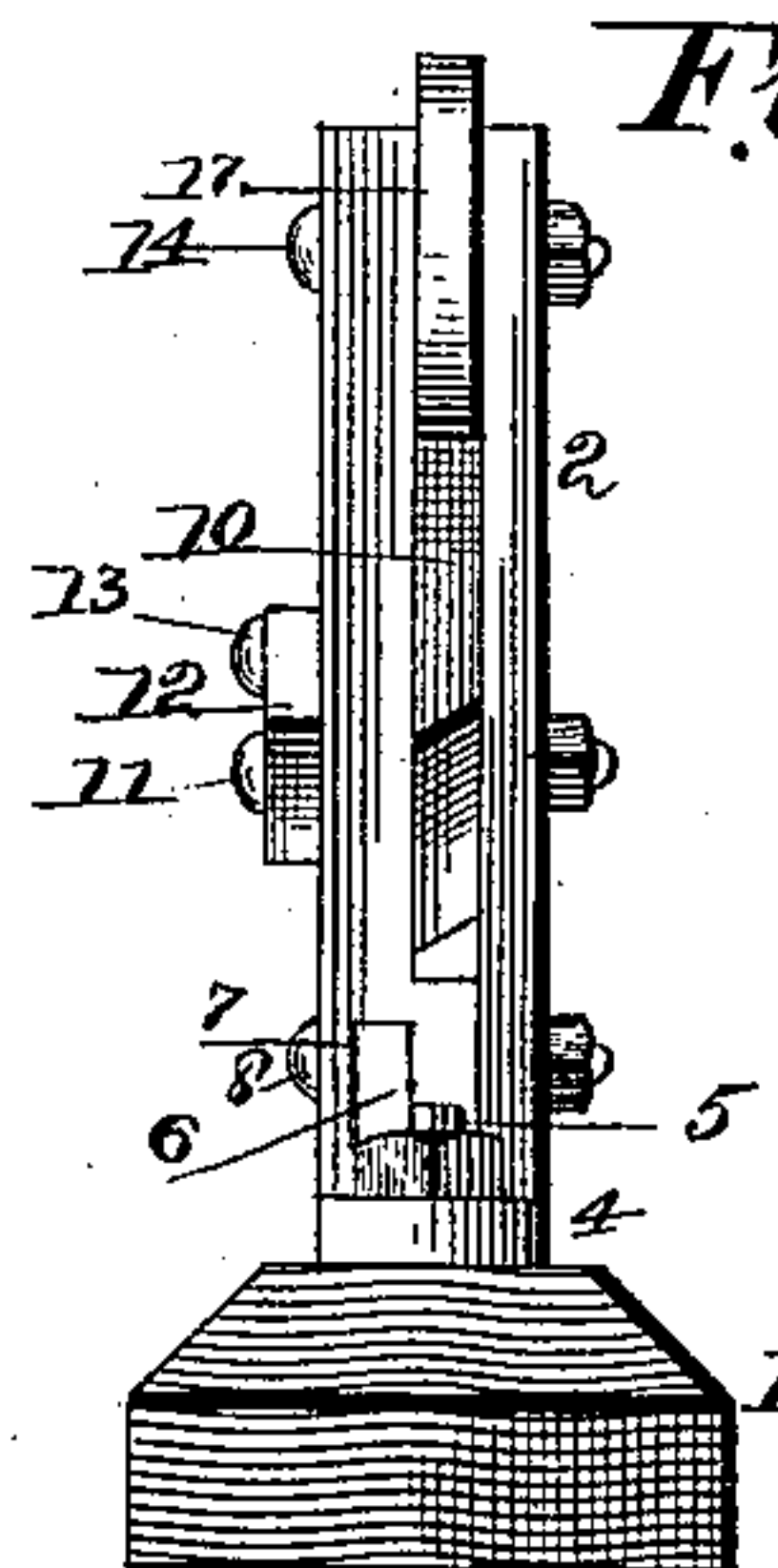


Fig. 3.

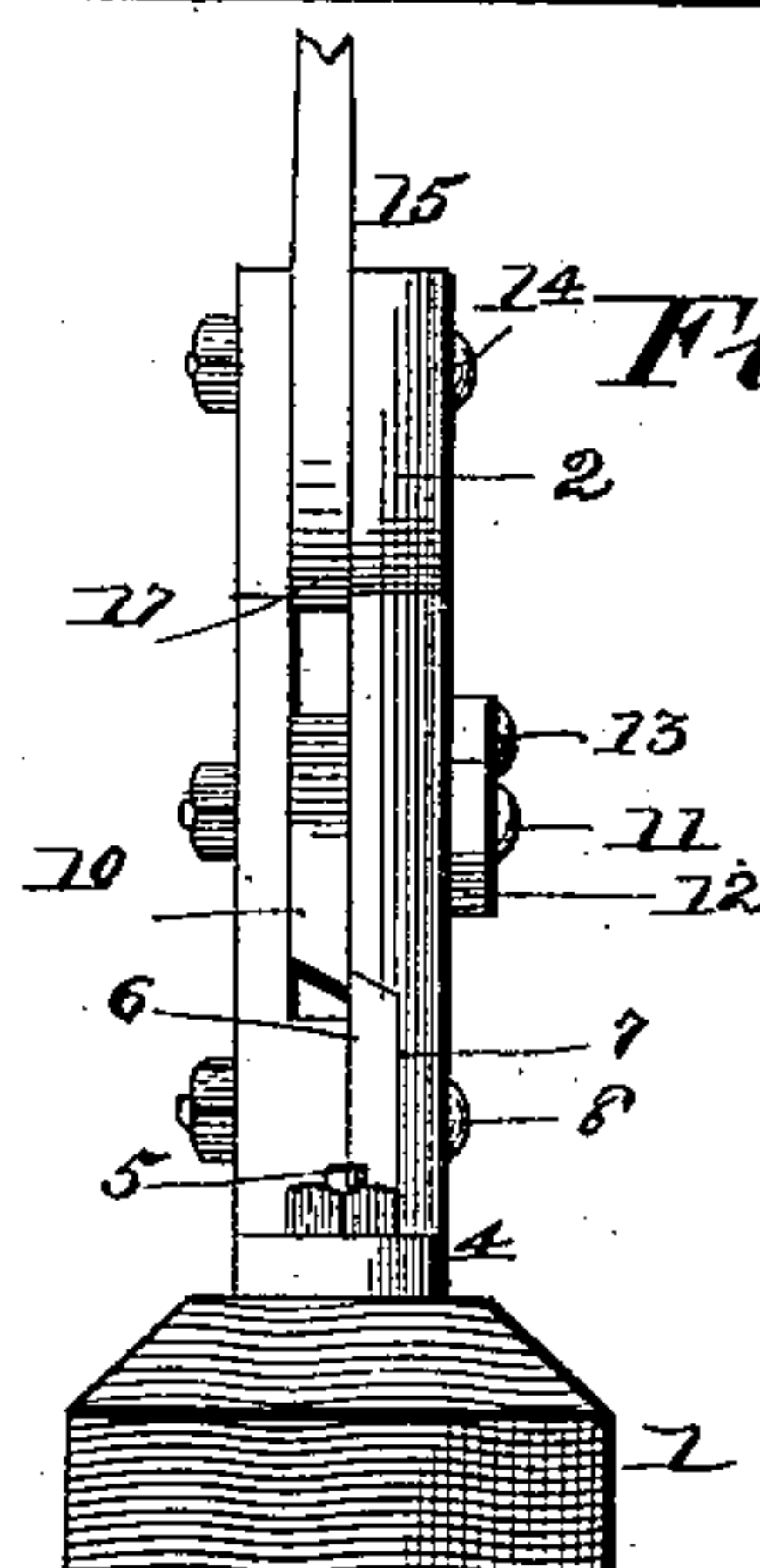


Fig. 4.

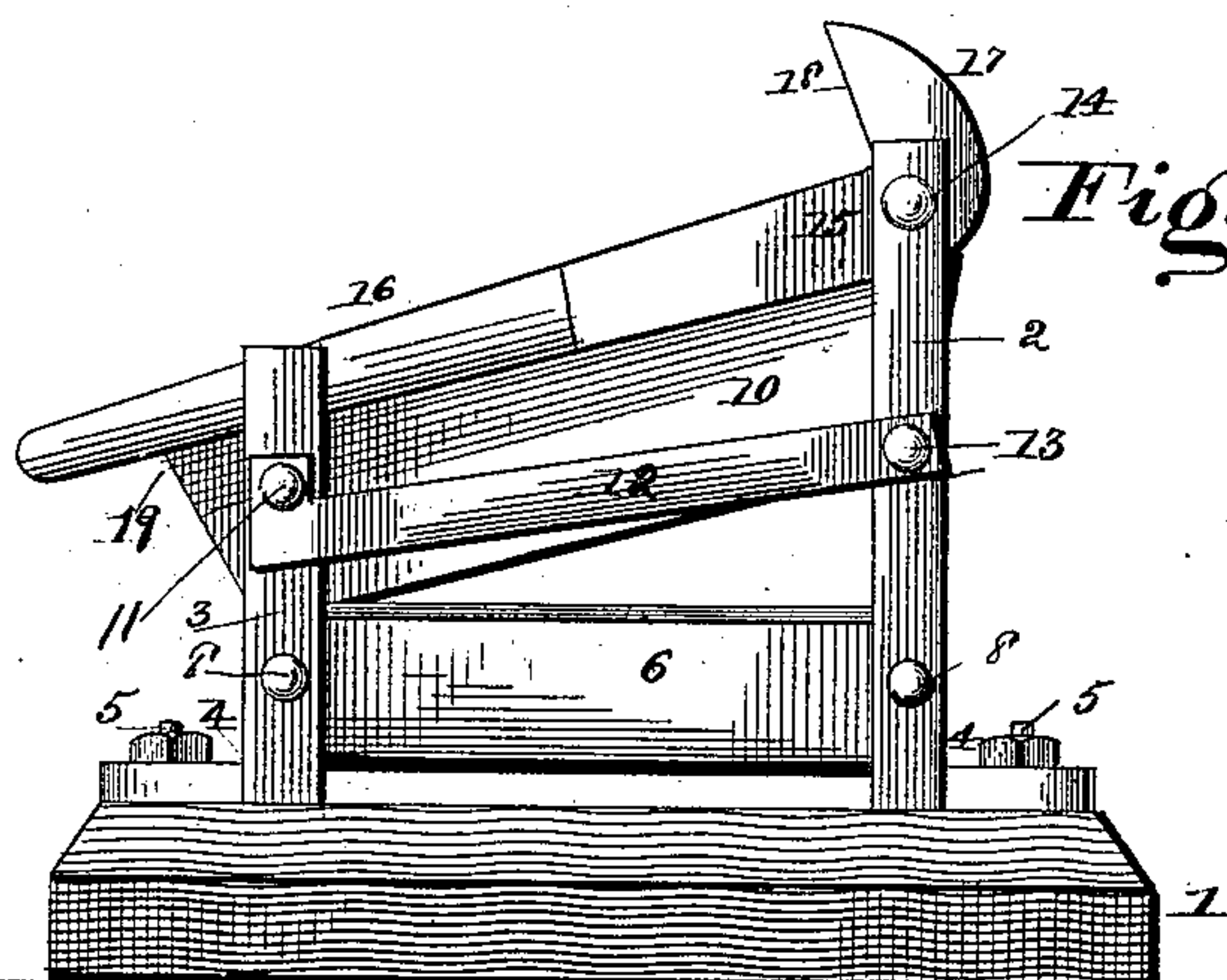


Fig. 5.

Witnesses
F. L. Ouraud

Edward Stanton

Inventor
Edwin Henry Watrous
By his Attorneys
Louis Bagger & Co.

UNITED STATES PATENT OFFICE.

EDWIN HENRY WATROUS, OF PAWLET, VERMONT.

METAL-CUTTING SHEARS.

SPECIFICATION forming part of Letters Patent No. 370,295, dated September 20, 1887.

Application filed December 31, 1886. Serial No. 223,083. (No model.)

To all whom it may concern:

Be it known that I, EDWIN HENRY WATROUS, a citizen of the United States, and a resident of Pawlet, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Metal-Cutting Shears; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front view of my improved metal-cutting shears. Fig. 2 is a rear view of the same. Fig. 3 is an end view from the free end of the knife. Fig. 4 is an end view from the pivoted end of the knife, and Fig. 5 is a front view of the machine, showing the lever tilted back to raise the blade.

Similar numerals of reference indicate corresponding parts in all the figures.

My invention has relation to that class of metal-cutting shears in which the pivoted knife is depressed by means of a cam-lever; and it consists in the improved construction and combination of parts of such shears as are hereinafter more fully described and claimed.

In the accompanying drawings, the numeral 1 indicates the base for the shears, which base may be of any suitable construction and shape, and has two pairs of uprights, 2 and 3, secured upon it, the united ends, 4, of each pair of uprights being bent at a right angle to the uprights and secured by means of bolts 5 to the base. The pairs of uprights are connected at their lower ends by means of the lower stationary knife, 6, having its ends secured in recesses 7 in the uprights by means of the bolts 8.

The movable knife 10 has one end pivoted upon a nutted bolt, 11, passing through one pair of uprights, and one end, 19, of the upper edge of the knife projects beyond the pivotal bolt, and the free end of the knife slides between the other pair of uprights.

An oblique brace or bar, 12, is secured to the pivotal bolt for the knife, and to a bolt, 13, passing into the rear upright of the taller pair, and a bolt, 14, passes through the upper ends of the taller pair of uprights and through the inner end of a cam-lever, 15, having a

handle, 16. The inner end of the cam-lever is provided with a cam, 17, having its rear edge, 18, cut off at a right angle to the handle, and the enlarged portion of the cam may bear with its periphery against the upper edge of the free end of the knife when the lever is tilted with its handle outward over the taller pair of uprights.

When the shears are to be used, the lever has its handle tilted inward over the back of the pivoted knife and resting upon the same, as shown in Fig. 2, and by depressing the handle when in this position the rearwardly-projecting end 19 of the knife may be depressed and the free end raised, admitting of the insertion of the metal to be cut, as shown in Fig. 5. The lever is now tilted outward with the handle, allowing the knife to rest against the article to be cut, and the widening portion of the cam will gradually force the knife into the metal, cutting the same as the handle is depressed.

It will thus be seen that a very simple and durable machine is produced, which may cut any ordinary article with ease, and the machine may be manufactured at a comparatively low price, being very simple of construction, and will not be liable to get out of order or break by ordinary usage, although it may be easily repaired by any ordinary blacksmith or other metal-worker if broken or worn out.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In metal-shears, the combination of two pairs of uprights, a stationary knife secured at its ends thereto, a movable knife pivoted at one end between one of said pairs of uprights, the upper edge of which at one end projects beyond the pivotal bolt, and a cam-lever pivotally secured between the other pair of uprights, the handle of which is adapted to be forced upon the end of the movable knife that projects beyond its pivotal point and to raise the free end of said knife.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

EDWIN HENRY WATROUS.

Witnesses:

REGINALD MAXWELL ROBINSON,
ALLEN WINTER.