S. ELLIOTT.

Straw Cutters.

No. 70,539. Patented Nov. 5, 1867.

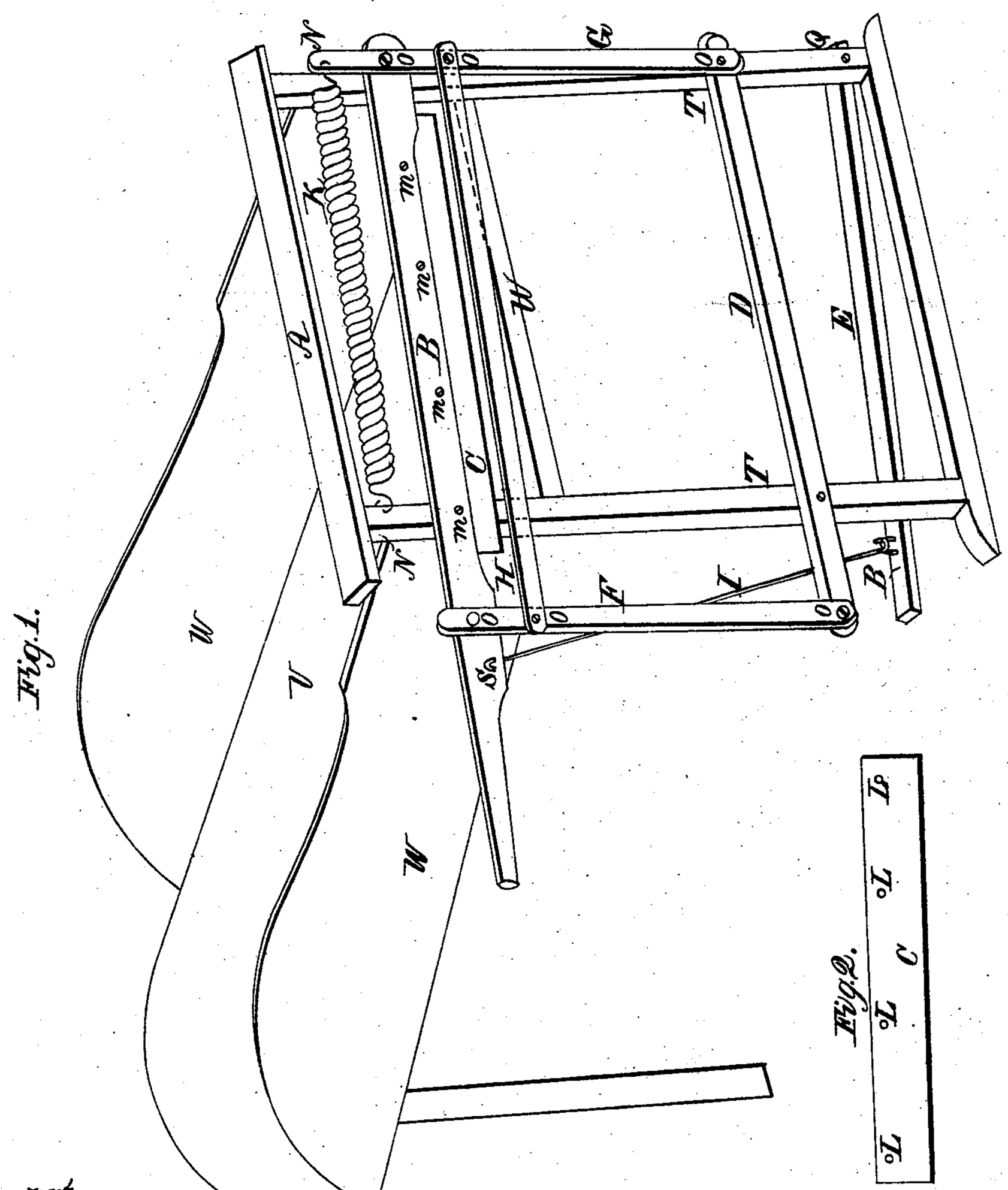

Fig. 1.

Fig. 2.

Witnesses.

Thos A Dugdale

Augustus P Young.

Inventor.

Stephen Elliott.

United States Patent Office.

STEPHEN ELLIOTT, OF RICHMOND, INDIANA.

Letters Patent No. 70,539, *dated November* 5, 1867.

IMPROVEMENT IN STRAW-CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, STEPHEN ELLIOTT, of the city of Richmond, county of Wayne, and State of Indiana, have invented new and useful Improvements in Straw-Cutters; and I do hereby declare the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is the cutting-knife detached.

A, in fig. 1, is the front frame. B, in fig. 1, is a lever to which the cutting-knife is secured. C is the cutting-knife, shown at *c* in fig. 2. D is a cross-piece secured to the front of the frame A. E is a lever secured to the back of the frame A. F is a piece of wood connecting the lever B with the cross-piece D, and vibrating at the connections *o o*. G is also a piece of wood connected with the piece D at F, and with the lever B at *o*. H is a cross-piece (represented by red lines) attached, one end to the upright piece F, and the other end is attached to the upright piece G. I is an iron rod attached at S to the lever B, and at R to the lever E. K is a spiral spring, one end of which is attached to the upper end of the upright G at N; the other end of said spring is secured to the frame A at N. L L L L, in fig. 2, are holes in the cutting-knife. M M M M, in fig. 1, are screws by which the cutting-knife is secured to the lever B. N N shows where the spiral spring K is attached. O O O O O O are the attachments or bolts upon which the upright pieces F G and cross-piece H, and lever B vibrate. Q is a bolt by which the lever E is secured to the frame A, and forms the fulcrum for said lever E. R is a staple near the end of the lever E, into which the lower end of the rod I is hooked. S the upper end of the rod I, hooked into the lever B near the hand-hold. T T shows where the cross-piece D is attached firmly to the front of the frame A. U is a cross-piece in the front of the frame, to which is nailed or screwed the bottom V of the box. V is the bottom of the straw-box; W W the sides of the straw-box. I will here remark that the cross-piece H may be varied so as to suit or gauge the length of straw desired to be cut, and may be secured either to the front side or back side of the uprights F and G.

Construction.

The box should be made three feet six inches long, of poplar boards one inch thick, and from eight to twelve inches wide. The front frame A may be made of good oak or ash timber, two by three inches, or smaller if desired. The lever B and upright pieces F and G, should be made of good hard wood, the uprights half an inch thick, and two inches wide. The lever B should be made of timber one inch thick. The rod I should be made of quarter-inch round iron. The spiral spring K should be strong enough to draw the upright G toward the operator, carrying with it the lever B, upright F, and cross-piece H. The knife should be made of thin steel ground to an edge.

Operation.

It will be seen that by placing straw on the bottom V of the box, and pushing it against the cross-piece H. (which acts as a gauge for the length of the cut,) and bearing down the lever B with the hand, and the lever E with the foot, the labor of cutting is divided between the hand and foot, and the operator is able to cut a larger quantity in the same time than by hand alone.

I do not claim a machine for cutting straw, as such have long been in use. But what I do claim as my invention, and desire to secure by Letters Patent, is—

Constructing a straw-cutter, as above described, when the same is composed of the spiral spring K, lever B, cross-piece H, uprights F and G, cross-piece D, lever E, rod I, and frame A, arranged and operated substantially as above described.

STEPHEN ELLIOTT.

Witnesses:

THOS. A. DUGDALE,

A. B. YOUNG.