

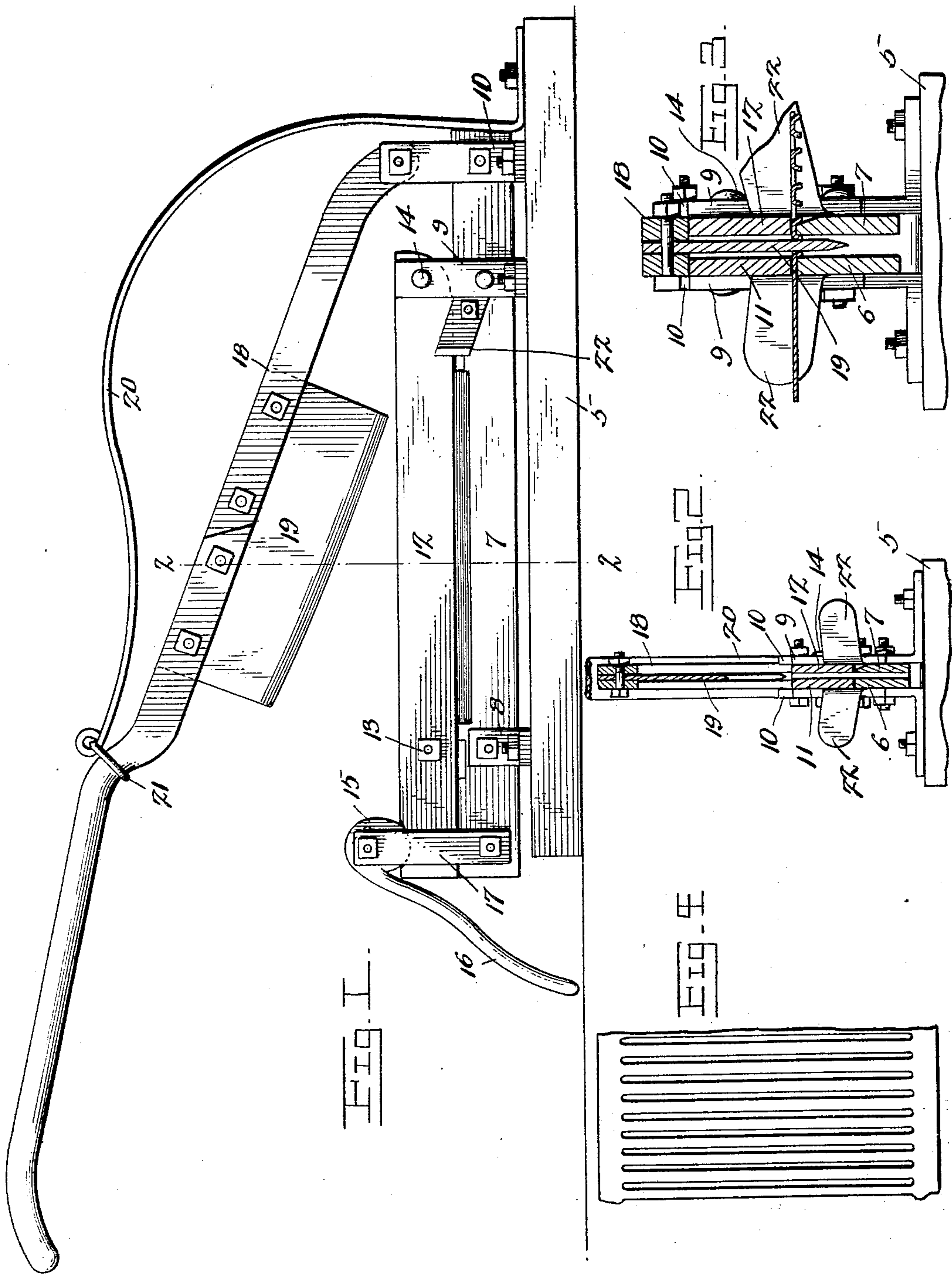
No. 677,205.

Patented June 25, 1901.

H. J. HACKETT.
METAL SHEARS.

(Application filed Apr. 23, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

HARRY J. HACKETT, OF YOAKUM, TEXAS.

METAL-SHEARS.

SPECIFICATION forming part of Letters Patent No. 677,205, dated June 25, 1901.

Application filed April 23, 1901. Serial No. 57,125. (No model.)

To all whom it may concern:

Be it known that I, HARRY J. HACKETT, a citizen of the United States, residing at Yoakum, in the county of Dewitt and State of Texas, have invented a new and useful Metal-Shears, of which the following is a specification.

This invention relates to shears for cutting sheet metals; and it has for one object to provide a machine of this nature specially designed for slotting sheets of metal in the formation of devices for plaiting cloth, a further object of the invention being to provide a machine that will be easy and simple of operation and may be operated with accuracy and into which the plate may be inserted and from which it may be removed with facility.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation showing the complete machine. Fig. 2 is a section on line 2 2 of Fig. 1 with the cutting-knife raised. Fig. 3 is a section similar to Fig. 2 with the cutting-knife lowered and engaged through a sheet of metal. Fig. 4 is a plan view showing a portion of a plaiting-plate formed in the present machine.

Referring now to the drawings, the present machine comprises a base 5, upon which is fixed the female die or lower knife, including the plates 6 and 7, which are held to the base by the three pairs of angle-irons 8, 9, and 10, the cutting portions of the plates being held in spaced relation by means of spacing-plates disposed between their end portions. The pair of angle-irons 9 project above the plates 6 and 7, and between these projecting ends is pivoted the guide and metal-clamp, consisting of the two plates 11 and 12, having spacing-plates disposed between their end portions, and which plates at their outer ends are held together by a bolt 13 and at their inner ends are connected by a bolt 14, which is also engaged with the ends of the irons 9 to form a pivot for the plates, so that they may be raised and lowered. The interspace between the plates of the guide and clamp registers with the interspace between the plates of the lower cutter, as shown in Figs. 2 and 3. The sheet of metal to be slotted is disposed upon the upper edges of the plates

6 and 7, the clamp having been first raised, and the clamp is then lowered upon the metal and is held in place by the eccentric 15 at the end of a lever 16, which is pivoted between the links 17, which are pivotally connected to the ends of the plates 6 and 7. The links permit of swinging the lever upwardly to engage the eccentric with the seat in the ends of the plates of the clamp, after which the lever is depressed to rotate the eccentric and lock the clamp in its operative position. The angle-irons 10 also project above the plates 6 and 7, and between these upwardly-projecting ends is pivoted the end of a hand-lever 18, which is slotted longitudinally to receive the cutting-blade 19, which is positioned to be passed through the interspace between the plates of the clamp and with its cutting edge between the plates of the lower cutter to cut a slot in the sheet of metal held by the clamp. To raise the lever when the latter is released, a leaf-spring 20 has a foot at one end, which is bolted fast to the base 5 at the end of the lower cutter, and this spring extends in a compound curve above and forwardly of the lever, and its end is connected to the lever through the medium of a link 21.

In operating this device the clamp is raised and the sheet of metal is placed on the lower cutter and against the stops 22, which project laterally therefrom and above the upper edge of the lower cutter. The clamp is then lowered to hold the sheet of metal, and the lever is depressed to actuate the knife which is passed through the metal. The lever is then released to permit it to rise, and the clamp is disengaged to permit of lateral shifting of the sheet into position for a second cut. The operation is continued until the desired number of cuts is formed.

What is claimed is—

1. A device of the class described comprising a lower cutter including spaced plates having cutting edges, a combined clamp and guide including spaced plates mounted for movement into and out of position to rest upon the plates of the lower cutter, means for holding the clamp in operative position, and a cutting-blade mounted for movement between the plates of the clamp and between the plates of the lower cutter.

2. A device of the class described compris-

- ing a lower cutter including spaced plates having cutting edges, a guide pivotally mounted for movement into and out of contact with the edges of the plates of the cutter to clamp a
5 sheet of metal thereagainst, a knife pivotally mounted for movement through the guide to pass its edge between the plates of the lower cutter, and a spring connected with the knife for returning it when released.
- 10 3. A device of the class described comprising a lower cutter including spaced plates having upper cutting edges, stops upon the plate, a combined clamp and guide pivotally mounted for movement into contact with the upper
15 edges of the plates of the cutter, said guide and clamp including spaced plates, a lever mounted upon the lower cutter and having a cutting-blade disposed for movement through the guide and between the plates of the lower cutter, and a leaf-spring mounted beyond the
20 pivoted end of the lever and extending upwardly and over the lever and having its upper end connected to the lever to raise it when released.
- In testimony that I claim the foregoing as
25 my own I have hereto affixed my signature in the presence of two witnesses.

HARRY J. HACKETT.

Witnesses:

F. MERGENTHAL,
F. F. PINTER.