

(No Model.)

2 Sheets—Sheet 1.

R. J. THOMPSON.
METAL SHEARS.

No. 530,059.

Patented Nov. 27, 1894.

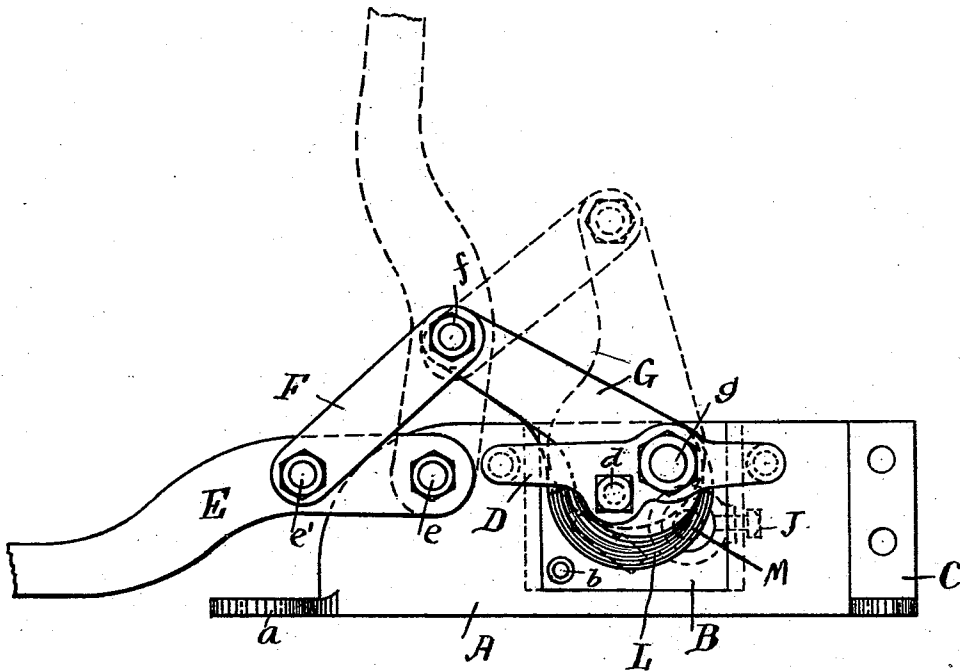


Fig 1.

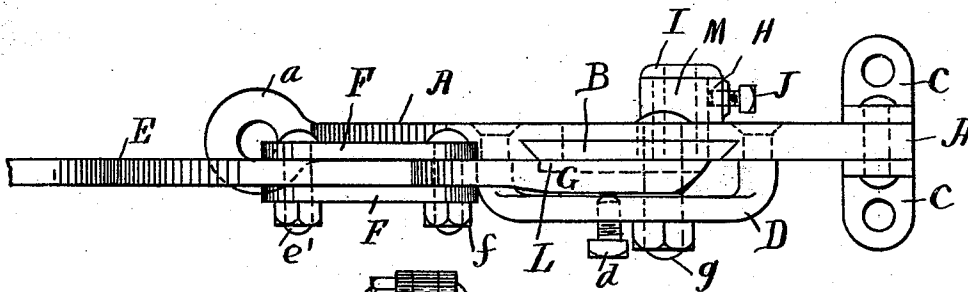


Fig 2.

WITNESSES:
S. G. Thurman
C. V. Thurman

Fig 3.

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BY
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ATTORNEY.

(No Model.)

R. J. THOMPSON.
METAL SHEARS.

2 Sheets—Sheet 2.

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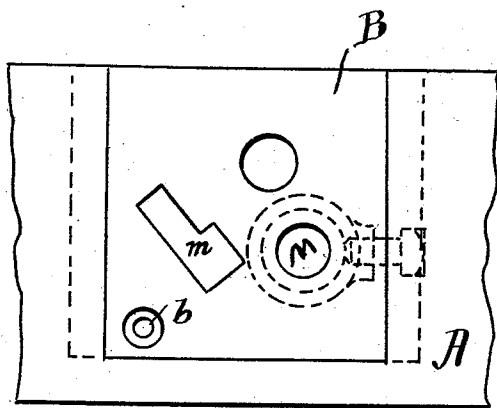


Fig 4.

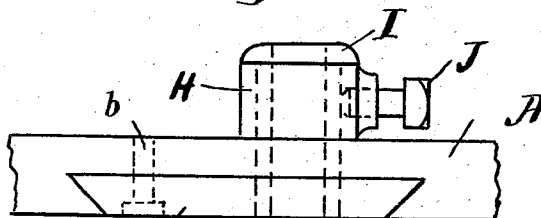


Fig 5.

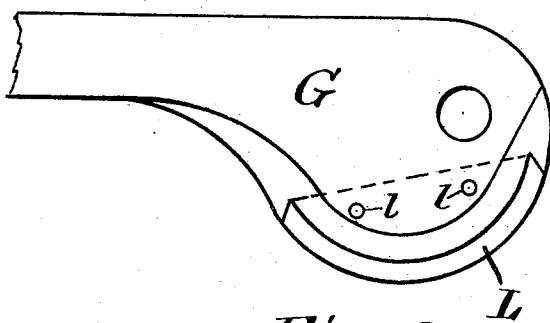


Fig 6.

WITNESSES:

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C. V. Thurman.

INVENTOR

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BY

John S. Thurman
ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT JAMES THOMPSON, OF GRANDIN, MISSOURI.

METAL SHEARS.

SPECIFICATION forming part of Letters Patent No. 530,059, dated November 27, 1894.

Application filed March 24, 1894. Serial No. 505,025. (No model.)

To all whom it may concern:

Be it known that I, ROBERT JAMES THOMPSON, a citizen of the United States, residing at Grandin, in the county of Carter and State of Missouri, have invented certain new and useful Improvements in Shears; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in metal shears, and it consists of the novel construction, combination and arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

The object of my invention is to provide a simple and inexpensive machine for shearing round, square, flat or sheet metals, yet strong and durable and capable of cutting thick metals by means of the eccentric cutter and arrangements of the levers without much exertion on the part of the operator.

A further object of my invention is to provide an insertible die or face plate, so that he die can be renewed at small expense.

Similar letters of reference indicate the same parts throughout the several views.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a side elevation. Fig. 2 is a plan view of same. Fig. 3 is an end view. Fig. 4 is an enlarged broken view of the frame showing the insertible die. Fig. 5 is a plan view of same. Fig. 6 shows the method of inserting the blade in the eccentric lever.

In the accompanying drawings, A designates the main frame or body of the shears, which is provided with the lug *a*, and brackets C to bolt same to the floor or to a suitable table.

B is the steel die which is dove-tailed and insertible in the main frame, and after it is placed in position, it is bolted to the frame by means of the countersunk bolt hole *b*. Said die has the opening *m* for flat and square metals, and the round hole M for round metals. The projection or boss H, is integral with the frame A.

I is the insertible thimble or bushing which is used when different size round metals are to be cut, and is held in place by means of the set screw J.

G, is the knife or cutter with the cutting end made eccentric, and fulcrumed to the frame at *g*. The cutting edges of this knife can be made integral with the body, or they can be made with the insertible blade L with the upper edge dove-tailed to the main knife and securely held in place by means of the pins *l, l*. This arrangement will enable the cutter to be removed at a small cost when worn out.

D, is the cutter guard, which is riveted or bolted to the frame on each side of the cutter, and is provided with the set screw *d*, to press the cutter firmly against the die.

E, is the operating lever, and is fulcrumed to the frame at *e*.

F, is the connecting link, and is connected to the cutter at *f*, and to the operating lever at *e'*.

Many minor changes may be made and substituted for those shown, without departing from the spirit and scope of my invention.

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

1. A shears for metals, consisting of a main frame or body having suitable lugs to bolt the same to the table, and provided with an insertible die dove-tailed into said frame, an eccentric cutter fulcrumed to said frame and provided with a set screw to press said cutter against said die, a suitable operating lever pivoted to the main frame and connected to the cutter by means of links or hangers, substantially as set forth.

2. A shears for metals consisting of the main frame A, having the lug *a* and bracket C, to secure to the table, said frame provided with the insertible die B, dove-tailed into said frame, and provided with suitable openings for different shapes and sizes of metals, the projection H integral with the frame A, the insertible bushing I, set screw J to hold said bushing in place, the eccentric steel cutter G, fulcrumed at *g*, and held against the die by means of the guard D and set screw *d*, said guard secured to the main frame, the operating lever E, pivoted to said frame and

connected to the cutter by the links F, F', substantially as set forth.

3. In a shears for metals, the combination of
a main frame or body having suitable pro-
5 jections to bolt the same to the floor or table,
and provided with an insertible die dove-
tailed into said frame, said die provided with
suitable openings for different size metals
and secured to said frame by means of a bolt,
10 an eccentric cutter fulcrumed to said frame
and die and provided with an insertible blade
dove-tailed on the upper edge, and secured

by means of pins, a guard secured to said
frame and provided with a set screw to press
the blade against the face of the die, an op- 15
erating lever pivoted to said frame and con-
nected to the cutter by means of links or
hangers, substantially as described.

In testimony whereof I affix my signature in
presence of two witnesses.

ROBERT JAMES THOMPSON.

Witnesses:

M. E. LEONARD,
L. STINEMAN.