Nov. 17, 1925. 1,562,045

H. PELS

RECIPROCATING SHEARING MACHINE

Filed July 7, 1924

Fig. 1.

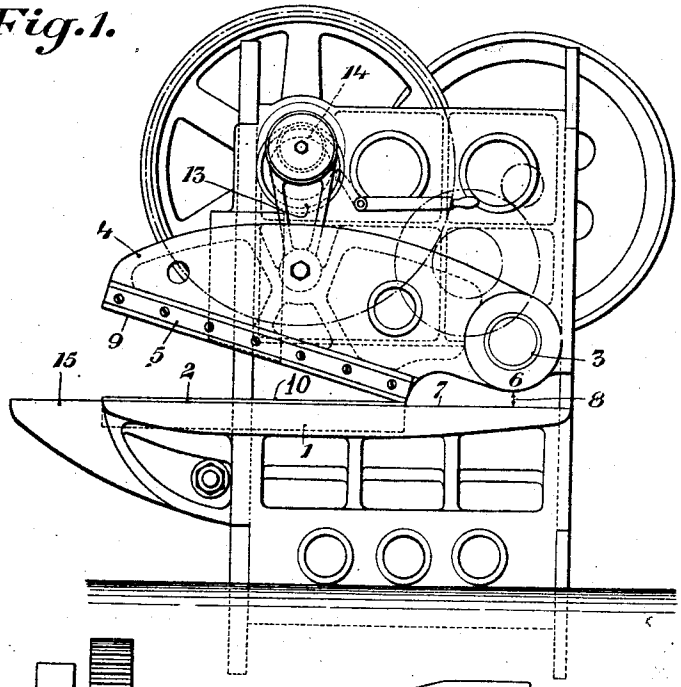
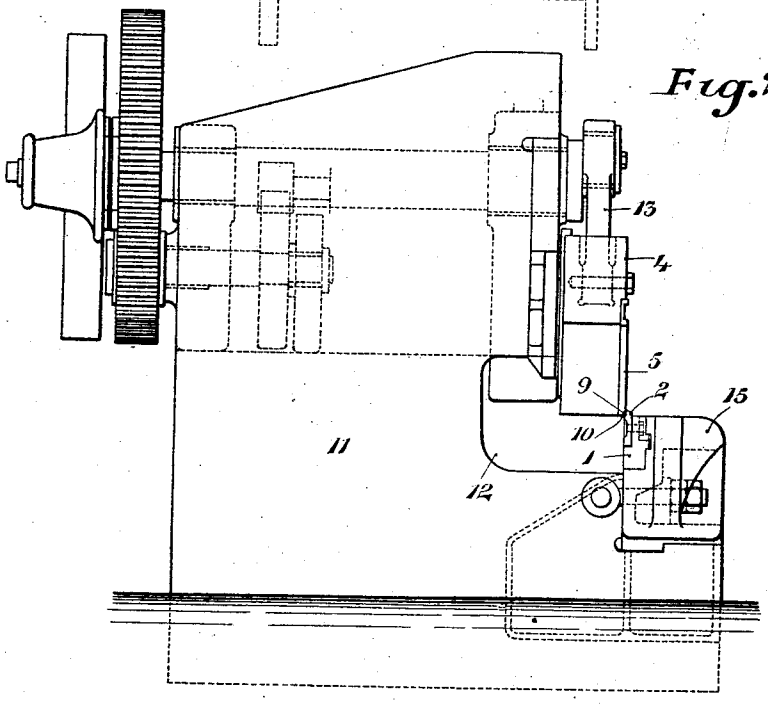


Fig. 2.



Inventor
Henry Pels
by Mifflin Babcock & Son
Attorneys

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UNITED STATES PATENT OFFICE.

HENRY PELS, OF BERLIN-CHARLOTTENBURG, GERMANY.

RECIPROCATING SHEARING MACHINE.

Application filed July 7, 1924. Serial No. 724,709.

To all whom it may concern:

Be it known that I, HENRY PELS, a citizen of the German Republic, residing at Berlin-Charlottenburg, Prussia, German Republic, have invented certain new and useful Improvements in Reciprocating Shearing Machines, of which the following is a specification.

This invention relates to reciprocating shearing machines of the type known as crocodile shearing machines and in which a reciprocating upper knife cooperates with a stationary lower knife for cutting off any kind of scrap iron. The known machines of this type are, however, capable only of cutting section iron or flat iron of a breadth smaller than the frame of the machine and corresponding with the length of the knives so that their applicability is limited.

This invention has for its object to do away with this disadvantage and to improve the construction of reciprocating shearing machines so that they can cut section irons and sheet iron plates of infinite length. With this object in view the upper knife is attached to a holder or lever at a suitable distance from its pivot axle which is journaled in the frame of the machine at a suitable distance above the lower holder, said holders being arranged with regard to the front parts of the U-shaped frame of the machine so that they project over one side of the frame.

An embodiment of the invention is shown by way of example on the accompanying drawing, in which:—

Fig. 1 shows the improved shearing machine in front elevation.

Fig. 2 is an end view of the same.

In the drawings the rocking lever is preferably a one-armed lever, although this is not essential. The shearing machine comprises a lower stationary holder 1 fixed on the machine frame. To this stationary holder 1 the lower knife 2 is fixed. The upper knife holder 4 consisting of a rocking lever is pivotally mounted on a pivot pin 3 and carries the upper knife 5. The knives extend beyond the one end of the machine frame and are of considerable length. The pivot pin 3 of the rocking knife holder 4 is, according to the invention, arranged above the lower knife holder 1 in such a manner that a free space 8 is formed between the fulcrum 6 of the rocking holder and the upper edge 7 of the lower stationary knife 2. The pivot pin 3 of the rocking holder 4 projects from the machine frame so that the cutting edge 9 of the upper knife 5, designed to move along the cutting edge 10 of the lower knife 2, stands in front of the machine frame. The machine frame 11 has a U-shaped mouth 12 open towards the knives. The rocking holder 4 is operated from an eccentric 14 through the intermediary of a pressure rod 13; or in any other convenient manner.

I claim:—

In a pivoted shearing machine, the combination of a machine frame having a U-shaped mouth and having an upper and a lower arm, a lower holder fixedly attached to the lower arm of said frame, a pivot pin fixed on said upper arm and projecting over the outer face of the machine frame and standing at a suitable distance above said lower holder, an upper holder pivotably mounted on said pivot pin both holders projecting over the machine frame, and knives fixed on the holders so that their ends project also over the machine frame.

In testimony whereof, I have signed my name to this specification at Berlin, Germany, this 16th day of June, 1924.

HENRY PELS.