Oct. 31, 1933. H. G. WOODBURN 1,933,465

WORK STRIPPER

Filed Nov. 14, 1932

Fig. 1.

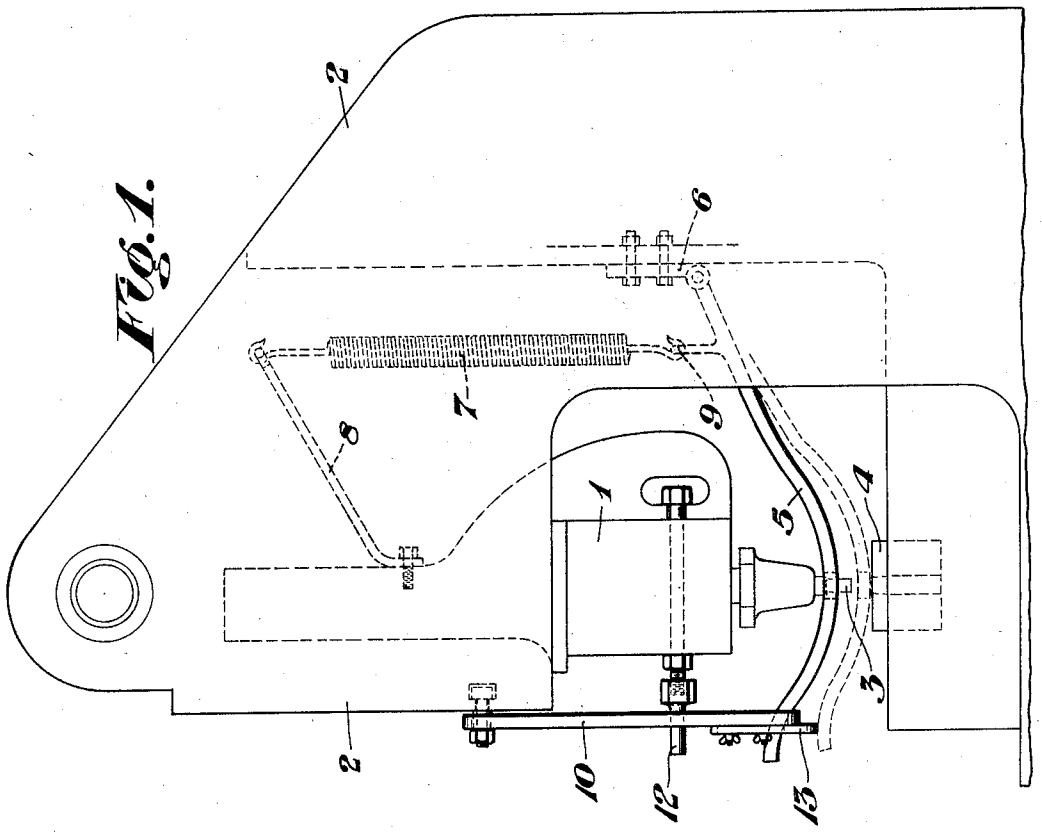
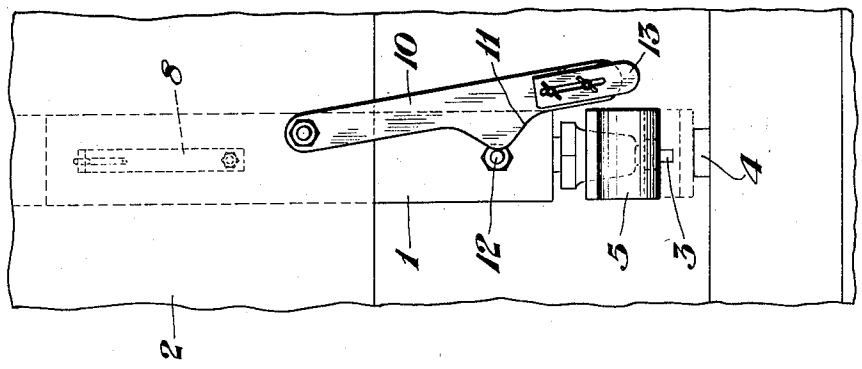


Fig. 2.



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WORK STRIPPER

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Serial No. 642,670

2 Claims. (Cl. 164—110)

This invention relates to work strippers for reciprocative tools, one of the objects being the provision of a simple mechanism which will operate automatically. Other objects may be inferred from the following example of one specific form of the invention as applied to a punching machine.

In the accompanying drawing, Figure 1 is a side elevation and Figure 2 is a front elevation.

The punching machine illustrated includes a vertically reciprocative mount or ram 1 operating in a housing 2 and carrying a punch 3 for movement into work on an anvil 4.

The present invention is intended to prevent the punch 3 carrying the work upwardly with it on its returning reciprocation. It comprises a work stripper 5 pivotally mounted by a vertically adjustable hinged section 6 for swinging movement onto the work on the anvil 4. A spring 7 interconnects the stripper 5 and mount 1 for substantially mutual movement of the two. This connection is effected through an arm 8 fixed to the reciprocative tool mount 1 and a hook 9 fixed to the stripper 5 adjacent its pivoting point.

A lever 10 is pivoted to the housing 2 so its lower end may swing over the free end of the stripper 5 when the latter is at substantially the lower limits of its swing. The lever 10 includes a cam surface 11 which cooperates with a projecting pin 12 fixed to the reciprocative tool mount 1. Preferably, the lever also includes a longitudinally adjustable end 13 so that engagement with the stripper 5 may be effected at the proper time.

The operation is substantially as follows:

When the reciprocative tool mount 1 pushes the punch 3 into work on the anvil 4 the stripper 5 will be brought to bear on the work through the lowering action of the spring 7. The lever 10 will then gravitationally swing to a vertical position so that its end 13 engages the free end of the stripper 5. When the mount 1 begins its returning reciprocation the lever 10 will hold the stripper on the work so the latter is held against being raised by the punch. As soon as the punch 3 is clear from the work the projecting pin 12 cooperates with the cam surface 11 to swing the lever 10 from its vertical position and the stripper is then released. The spring 7 has become tensioned during this movement so that the stripper is raised from the work in a speedy manner.

Although a specific form of this invention has been disclosed in accordance with the patent statutes, it is not intended that the inventive scope be limited exactly thereto, except as defined by the following claims.

I claim:

1. The combination of a reciprocative tool mount, a tool carried by said mount, a stripper pivoted to swing onto said tool's work, means for interconnecting said mount and said stripper, a depending lever arranged to gravitationally swing into engagement with said stripper when the latter is on the said tool's work and means for swinging said lever after said mount begins its returning reciprocations.

2. The combination of a vertically reciprocative tool mount, a tool carried by said mount, a stripper pivoted to swing onto said tool's work as said mount reciprocates and having a free end, a spring interconnecting said mount and stripper for substantially mutual movement, a lever pivoted so one end swings over the free end of said stripper when it is at substantially the lower limits of its swing and constructed with a cam surface, and a projecting element fixed to said mount and arranged to contact the cam surface of said lever.

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