

(No Model.)

W. & C. W. SLEEPER.
PUNCHING AND SHEARING MACHINE.

No. 393,036.

Patented Nov. 20, 1888.

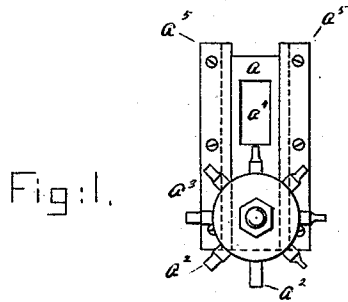


Fig:1.

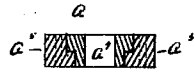


Fig:2.

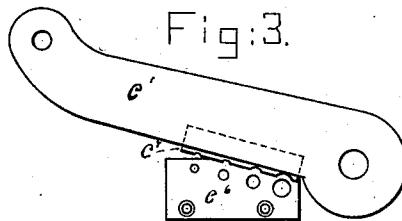
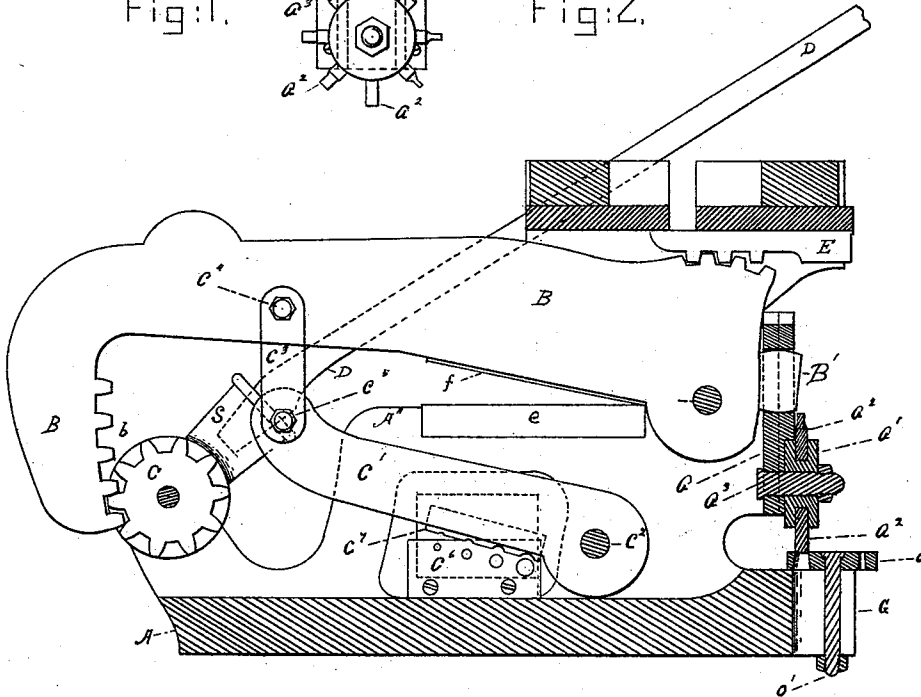


Fig:3.

Fig:4.

Witnesses

E. W. Akhurst.
W. C. Stephenson.

Inventors.

Wright Sleeper.
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UNITED STATES PATENT OFFICE.

WRIGHT SLEEPER, OF COATICOOK, QUEBEC, CANADA, AND CHARLES W. SLEEPER, OF ISLAND POND, VERMONT.

PUNCHING AND SHEARING MACHINE.

SPECIFICATION forming part of Letters Patent No. 393,036, dated November 20, 1888.

Application filed April 6, 1888. Serial No. 269,850. (No model.)

To all whom it may concern:

Be it known that we, WRIGHT SLEEPER, a British subject, residing at Coaticook, in the county of Stanstead and Province of Quebec, Canada, and CHARLES W. SLEEPER, a citizen of the United States, residing at Island Pond, in the county of Essex and State of Vermont, have invented (jointly) certain new and useful Improvements in Punching and Shearing Machines, of which the following is a specification.

Our invention is designed as an improvement upon a machine for which a patent was granted to Wright Sleeper, (September 13, 1870, bearing number 107,415.) and is composed of a rotary punching-head and auxiliary shearing lever and knives. These devices and the manner of application are illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the punching device. Fig. 2 is a section of the same, taken at the line *x x*. Fig. 3 is a vertical longitudinal section of the old machine, showing application of new devices. Fig. 4 is a side view of the auxiliary lever and knives.

The punching device is composed of a sliding block, *a*, recessed to receive the rotary punching (or punch-carrying) head *a'*, which head carries the punches *a²* and is secured to the sliding block *a* by the bolt *a³*. The sliding block *a* is provided with a slot, *a⁴*, Fig. 1, and the lever B is provided with a tooth, *B¹*, which fits said slot *a⁴*, causing the block *a* to slide as the lever B moves. The sliding block *a* is held in position by the guide-strips *a⁵ a⁵*, which are secured by screws to the frame A of the machine. The die *o* is secured to the frame by the bolt *o'*.

It will be readily understood that a move-

ment of the lever B causes the sliding block *a* to ascend or descend together with the punch-carrying head *a'*. The head *a'* may be revolved so as to bring either of the punches *a²* into position and secured by the bolt *a³*. The rotary die *o* may also be revolved until the proper hole is made to correspond with the punch and secured by the bolt *o'*. The auxiliary lever *c'*, secured to the frame A by the pin *c²*, is operated by the lever B by means of the straps *c³* and pins *c⁴ c⁵*.

Secured to the frame A is a steel plate, *c⁶*, drilled with holes of various sizes, and secured to the auxiliary lever *c'* is a steel plate, *c⁷*, the cutting-edge of which has semicircular grooves across its cutting-edge corresponding with the holes in the plate *c⁶*. A movement of the lever B causes the auxiliary lever *c'* to move down past the steel plate *c⁶*, the plate *c⁷* acting with the plate *c⁶* as shears for cutting round rods.

We make no claim to the construction of the machine as shown in Fig. 3 and described in the patent referred to above; but

What we claim as our joint invention, and desire to secure by Patent, is—

1. The combination of the lever B, the auxiliary lever *c'*, and the cutting-plates *c⁶ c⁷*.

2. The combination, with the levers B and *c'* and the plates *c⁶ c⁷*, of the sliding block *a* and the punch-carrying head *a'*, all substantially as described, and for the purpose set forth.

WRIGHT SLEEPER.
CHARLES W. SLEEPER.

Witnesses:

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W. C. HOPKINSON.