

No. 710,109.

Patented Sept. 30, 1902.

A. A. LOW.
CUTTING DEVICE.

(Application filed Feb. 21, 1902.)

(No Model.)

Fig. 1.

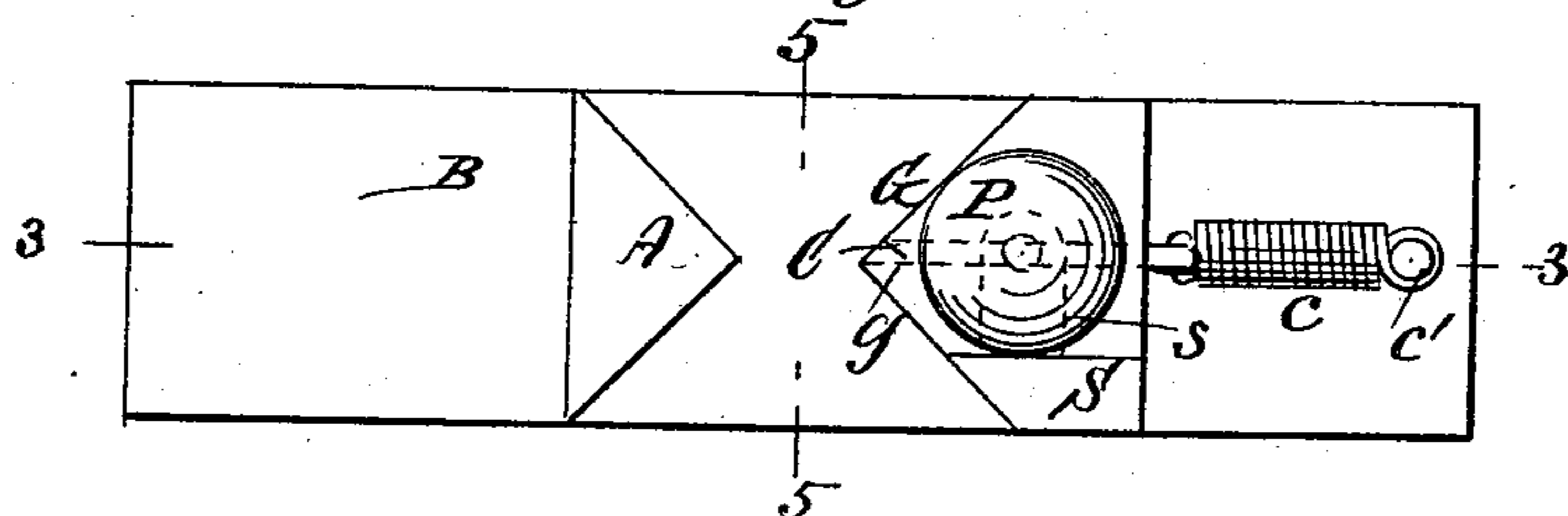


Fig. 2.

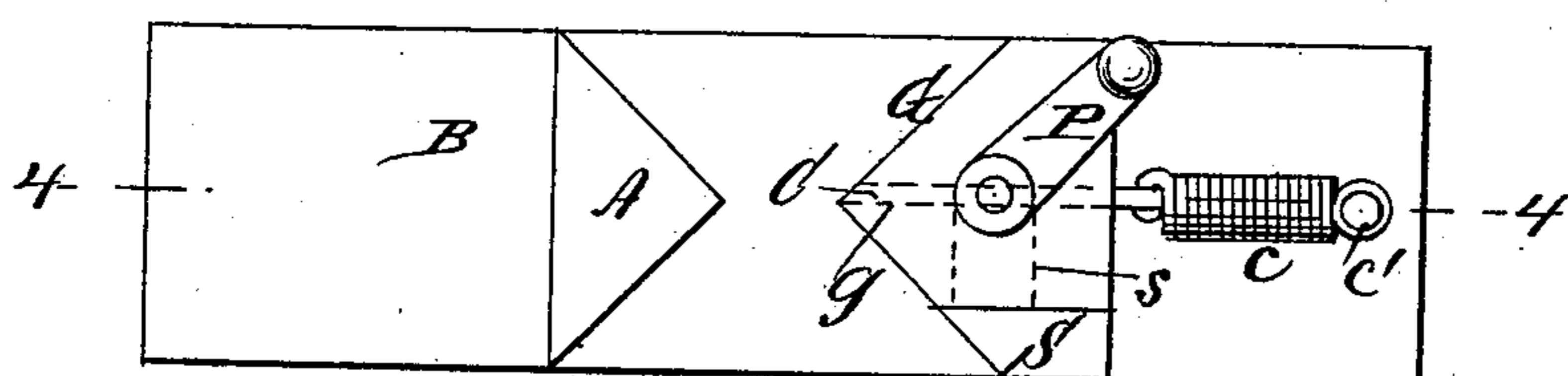


Fig. 3.

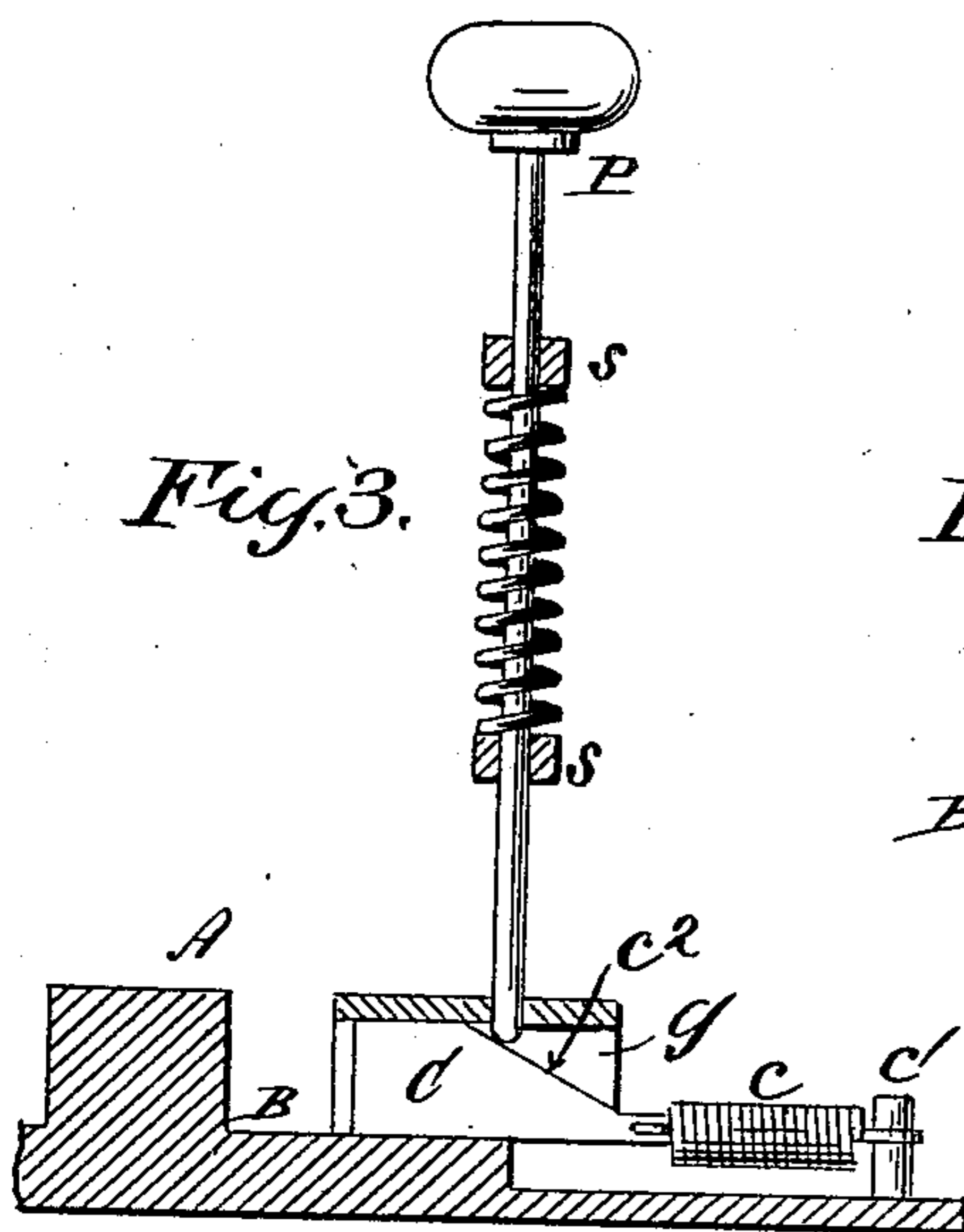


Fig. 5.

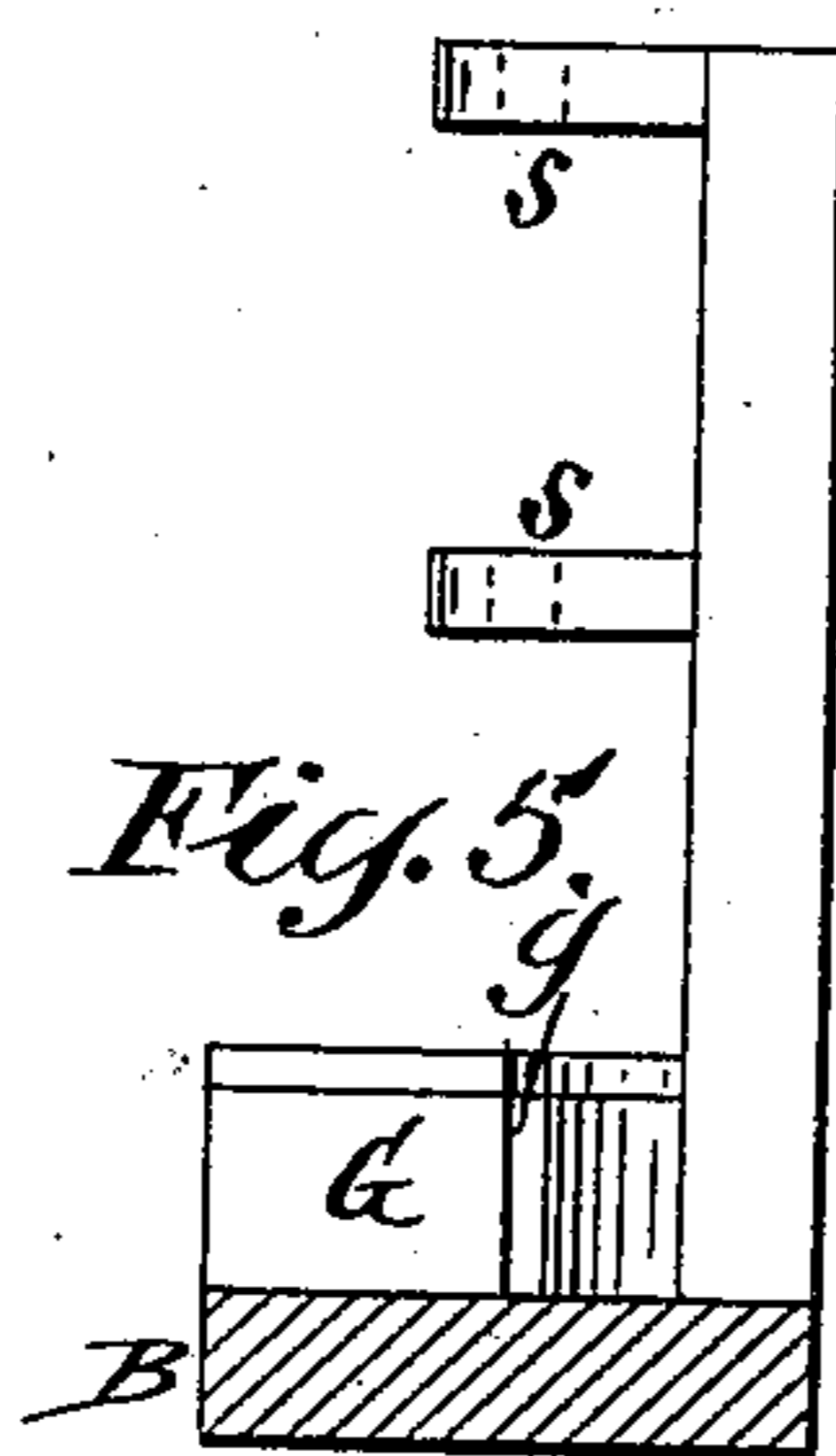


Fig. 4.

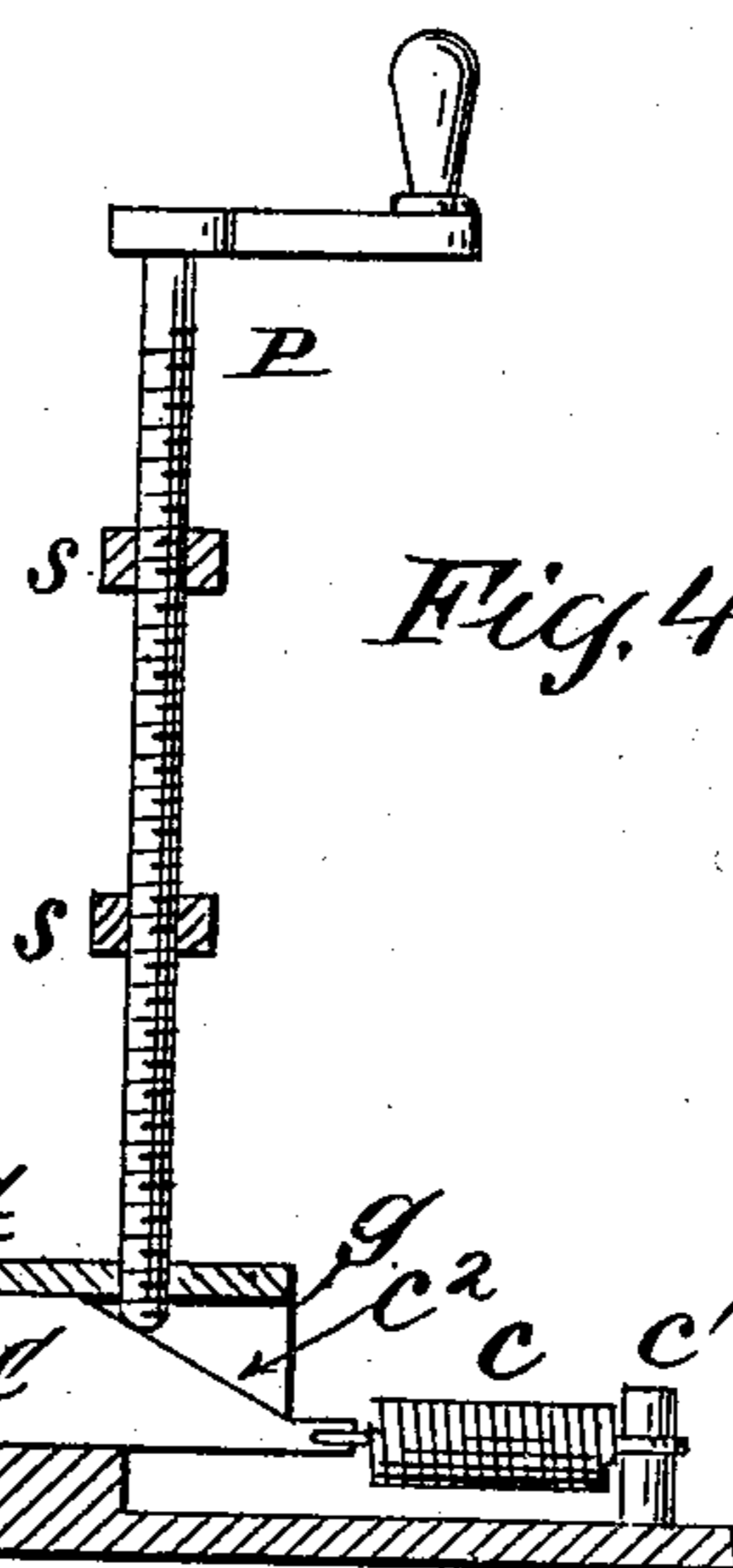
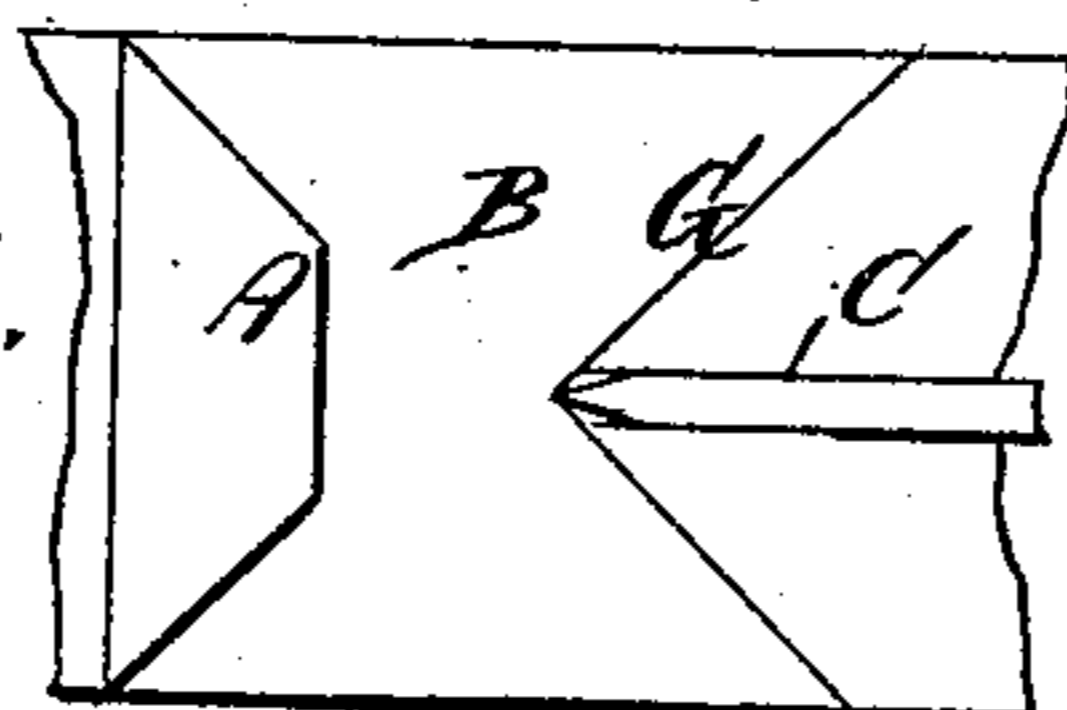


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF HORSESHOE, NEW YORK.

CUTTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 710,109, dated September 30, 1902.

Application filed February 21, 1902. Serial No. 95,026. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing at Horseshoe, St. Lawrence county, and State of New York, have invented certain new and useful Improvements in Cutting Devices, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention relates to cutting devices generally, as contradistinguished to my specific combination of parts for a special purpose set forth in my concurrent applications, Serial No. 85,346, filed December 10, 1901, and Serial No. 88,165, filed December 18, 1901.

I have found by actual test and experiment that my improved form of cutting implement may be advantageously employed in various trades and arts, and I herein describe and claim it as an independent device, disclaiming herein the specific combination and arrangement of parts described and claimed in said concurrent applications.

In the accompanying drawings, Figures 1 and 2 are plans showing two forms of my improved cutting device. Fig. 3 is a sectional elevation upon plane of line 3 3, Fig. 1. Fig. 4 is a sectional elevation upon plane of line 4 4, Fig. 2; Fig. 5, a transverse section upon plane of line 5 5, Fig. 1; Fig. 6, a plan of a portion of a modified cutting block and blade.

The base or bed plate B supports the cutting-block or anvil A as well as the standard S and guide-block G. The cutter-blade C rests in a raceway *g* in the guide-block G and is held normally in the retracted position by means of a spring *c*, one end of which is secured to its rear end, while the other is secured to the stationary stud *c'* on the base B. The forward stroke of the cutter-blade C is effected by means of the plunger P, the lower end of which rests against the inclined surface or wedge *c''*, formed on the rear of said blade. As the plunger P descends it forces the blade C forward with exceptional force owing to this wedge-shaped formation of the cutter-blade. Obviously the means for forcing down the plunger P are of secondary importance, and I do not limit myself to any

special construction in this respect. Thus in the drawings I have shown in Figs. 1 and 3 for quick movement a plain plunger depressed by hand against the resistance of a compressible spring, by which the plunger is returned to its normal position when relieved from pressure. In Figs. 2 and 4 provision is made for the application of greater power by making the plunger P in the form of a male screw engaging with female screw-threads formed in the bearings *s s* on the standard S. By this means the blade may be forced through material of relatively great thickness and hardness.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a cutting device of the character described, the combination with a stationary cutting-block, of a horizontally-reciprocatory cutting-blade having inclined upper face, guides for said blade, a spring acting on the blade to hold it normally away from said block, and a vertically-movable plunger movable in guides with its lower end resting on said inclined face of the blade.

2. In a cutting device of the character described, the combination with a stationary cutting-block, of a horizontally-reciprocatory cutting-blade, a vertically-movable plunger with its lower end resting upon the upper face of the said blade which is inclined, and means for forcing said plunger downward to cause the blade to move toward the said block, and means for retracting said blade when the plunger is moved upward.

3. The combination with a stationary cutting-block, of a horizontally-reciprocatory cutting-blade having inclined upper face at one end, a guide-block for said cutting-blade, a raceway in said block, a plunger disposed vertically with its lower end movable through said guide-block, guides for said plunger, means for moving said plunger downward to force the blade endwise, and means for retracting said blade when the plunger is moved upward, all as set forth.

ABBOT AUGUSTUS LOW.

Witnesses:

D. W. GARDNER,
F. E. ROACH.