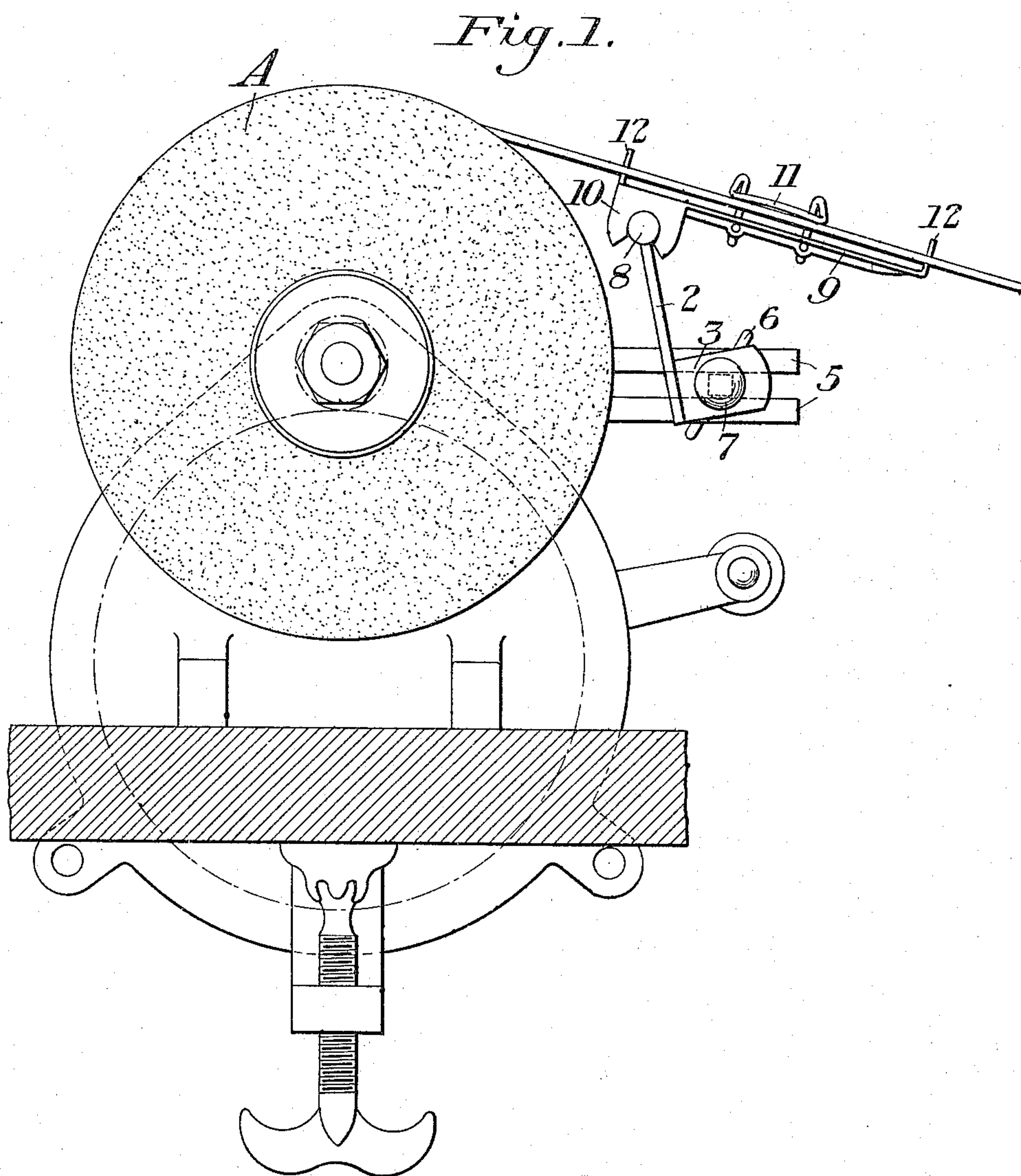


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 APPLICATION FILED JULY 14, 1914.

1,155,213.

Patented Sept. 28, 1915.

2 SHEETS—SHEET 1.



WITNESSES

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INVENTOR

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By Baker, Byrnes & Lamm
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2 SHEETS—SHEET 2.

Fig. 2.

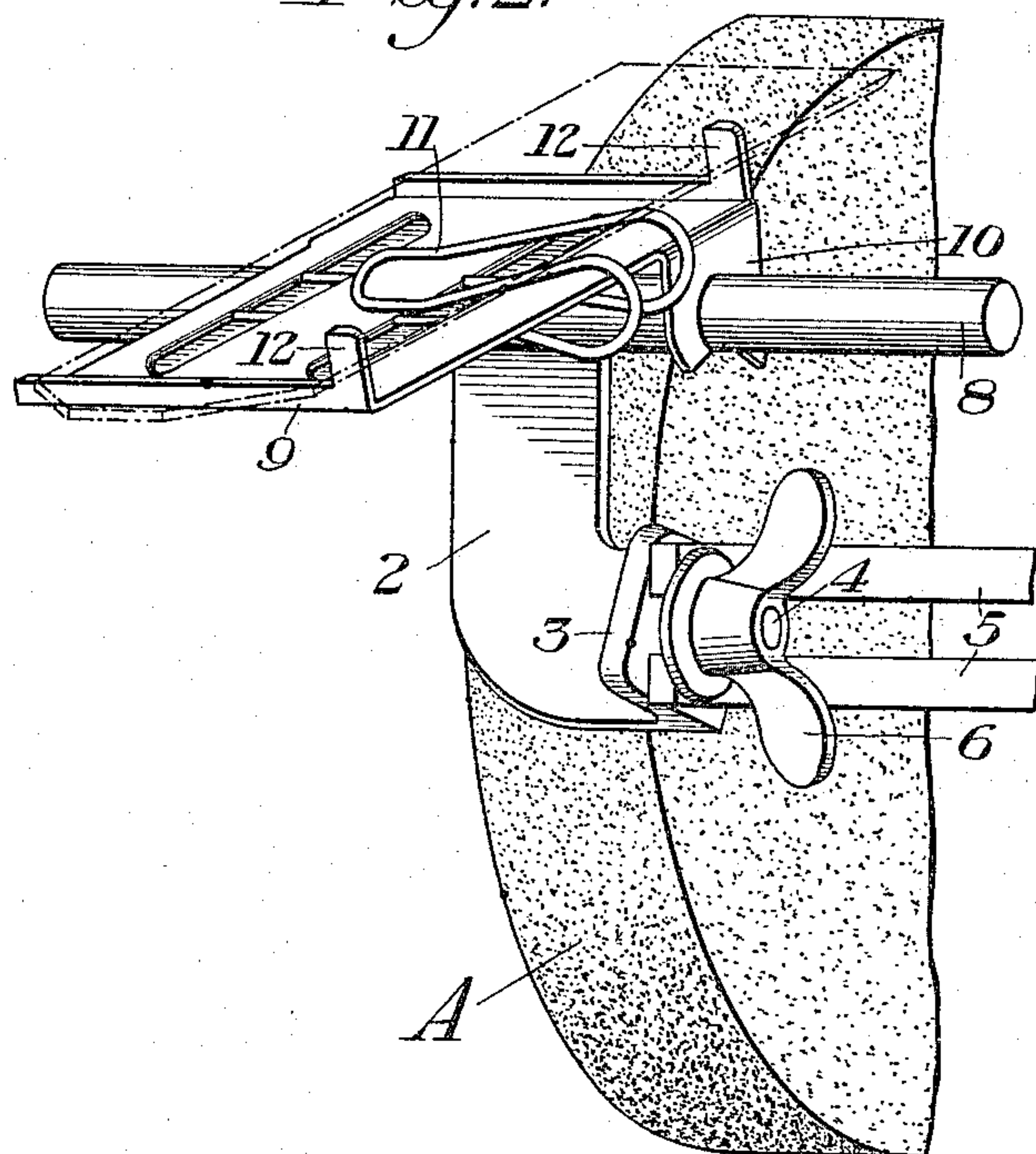
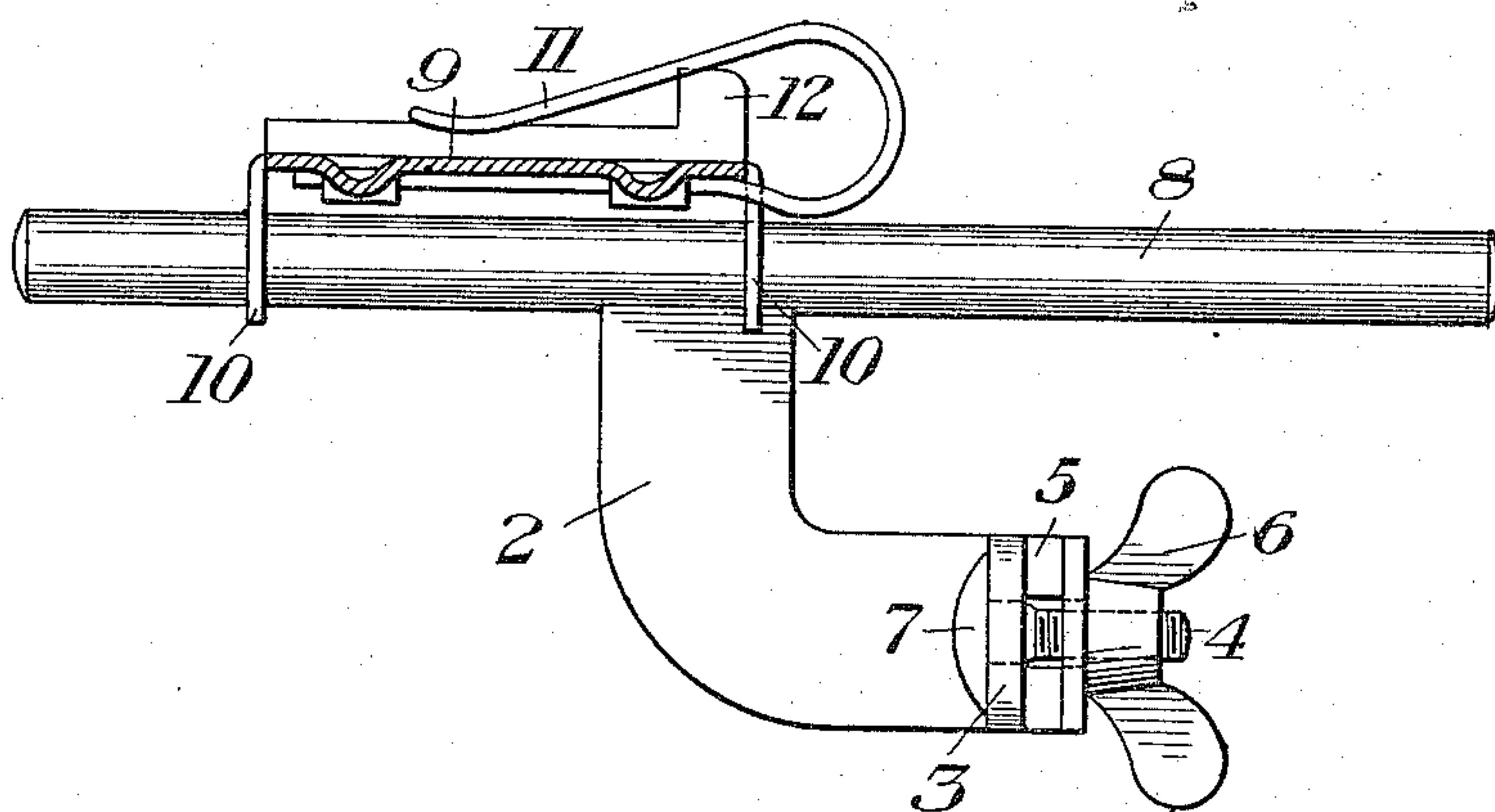


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

BENNETT F. CLARK, OF NIAGARA FALLS, NEW YORK, ASSIGNOR TO THE CARBORUNDUM COMPANY, OF NIAGARA FALLS, NEW YORK, A CORPORATION OF PENNSYLVANIA.

WORK-HOLDING ATTACHMENT FOR GRINDING-MACHINES.

1,155,213.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed July 14, 1914. Serial No. 850,902.

To all whom it may concern:

Be it known that I, BENNETT F. CLARK, a citizen of the United States, residing at Niagara Falls, in the county of Niagara and State of New York, have invented a new and useful Improvement in Work-Holding Attachments for Grinding-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an end view of a grinding wheel having my attachment applied thereto; Fig. 2 is a perspective view showing the application of the attachment to the grinding wheel; and Fig. 3 is a view partly in elevation and partly in section of the attachment.

My invention has relation to a work-holding attachment for grinding wheels, the object being to provide a simple and efficient device for holding edged tools of various kinds and sizes, such as chisels and plane bits, in a manner to permit them to be accurately and quickly sharpened. My invention also provides a work-holding attachment of this character which can be readily applied to existing grinders.

Referring to the accompanying drawings, the numeral 2 designates a bracket member or supporting arm having at its lower end a lug or ear 3, carrying a clamping screw 4, by means of which it may be attached to the frame of the grinder. In the particular construction of the grinder illustrated in the drawing, the frame has a fork member 5, to receive the shank or stem of the clamping screw 4 between the clamping nut 6 and the head 7. The supporting member or bracket 2 carries at its upper end the rod 8, which extends transversely of the periphery of the wheel and upon which is pivotally mounted the work-supporting plate 9. This plate is shown as having depending lugs or ears 10, which are shaped to engage and loosely turn upon the rod 8. Secured to the plate 9 is a bent holding spring 11, for the chisel, plane bit or other edged tool to be sharpened. The holding portion of this spring extends above the central portion of the upper surface of the plate 9, in position to hold the tool between it and said plate. The tool is slipped under this spring and against the upwardly projecting stop lugs 12.

When the supporting member or bracket 2

is clamped to the frame member 5, the guide rod or bar 8 is held rigidly in a position substantially parallel with the axis of the grinding wheel A, and at a distance from the periphery of the same. The member 9 is not only pivotally engaged with the said guide bar or rod, but can also be moved longitudinally thereon, in bringing different portions of the edge of the tool on to the grinding wheel.

The device permits tools of widely varying width and thickness to be properly held while being sharpened. After the support 2 is clamped in position as above described, the tool to be sharpened is slipped under the holding portion of the spring 11, and the perforations in the lugs or ears 10 are slidably and semirotatably engaged with the guide bar or rod 8. The bevel required on the tool being sharpened can be obtained by sliding the tool along the stops 12 toward or away from the grinding wheel; or by rotating the work holder on the guide bar or rod; or by rotating the complete attachment at the point where it is attached to the frame of the grinder. The grinding wheel proper rotates toward the work. The member 9 is turned on the guide bar or rod until the edge portion of the tool comes in contact with the grinding wheel, when it is moved slowly to and fro on the guide bar or rod until properly sharpened.

I do not desire to limit myself to the particular details of construction and arrangement of the parts as herein shown and described, and it is obvious that the details thereof may be changed in many respects, without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A work holder attachment for grinders, comprising a supporting bracket, a guide member connected thereto and extending in a direction substantially parallel to the axis of the grinding wheel, a work holding member having a plurality of downwardly extending lugs, said lugs having ears which engage the guide member, there being a space between said ears to permit the carrier to be removed from the bracket; substantially as described.

2. A work holder attachment for grinders, comprising a bracket, means for adjustably securing the bracket to the frame of

the grinder, said bracket having an arm extending at right angles to the axis of the grinding wheel and over the periphery of the wheel, a guide member carried by the arm and extending in a direction substantially parallel with the axis of the grinding wheel, a work holding member having downwardly extending lugs, ears extending downwardly from said lugs engaging the guide member, said ears forming stops for the work holder, there being a space between the ears to permit the removal of the work holder when moved out of its normal position; substantially as described.

3. A tool-holding device for grinders, comprising a guide member arranged to ex-

tend adjacent to the periphery of a grinding wheel in a direction substantially parallel to the axis of said wheel; a work-supporting plate slidably and rotatably engaged with the guide member, and a spring clip carried by said plate and adapted to hold the work thereon, said plate having stops for one side of the work, substantially as described.

In testimony whereof, I have hereunto set my hand.

BENNETT F. CLARK.

Witnesses:

HERBERT J. RANDALL,
ELMER J. TANNER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."