

No. 666,209.

Patented Jan. 15, 1901.

C. B. RUMSEY.
FRICTION CLUTCH.

(Application filed Oct. 18, 1900.)

(No Model.)

Fig. 1.

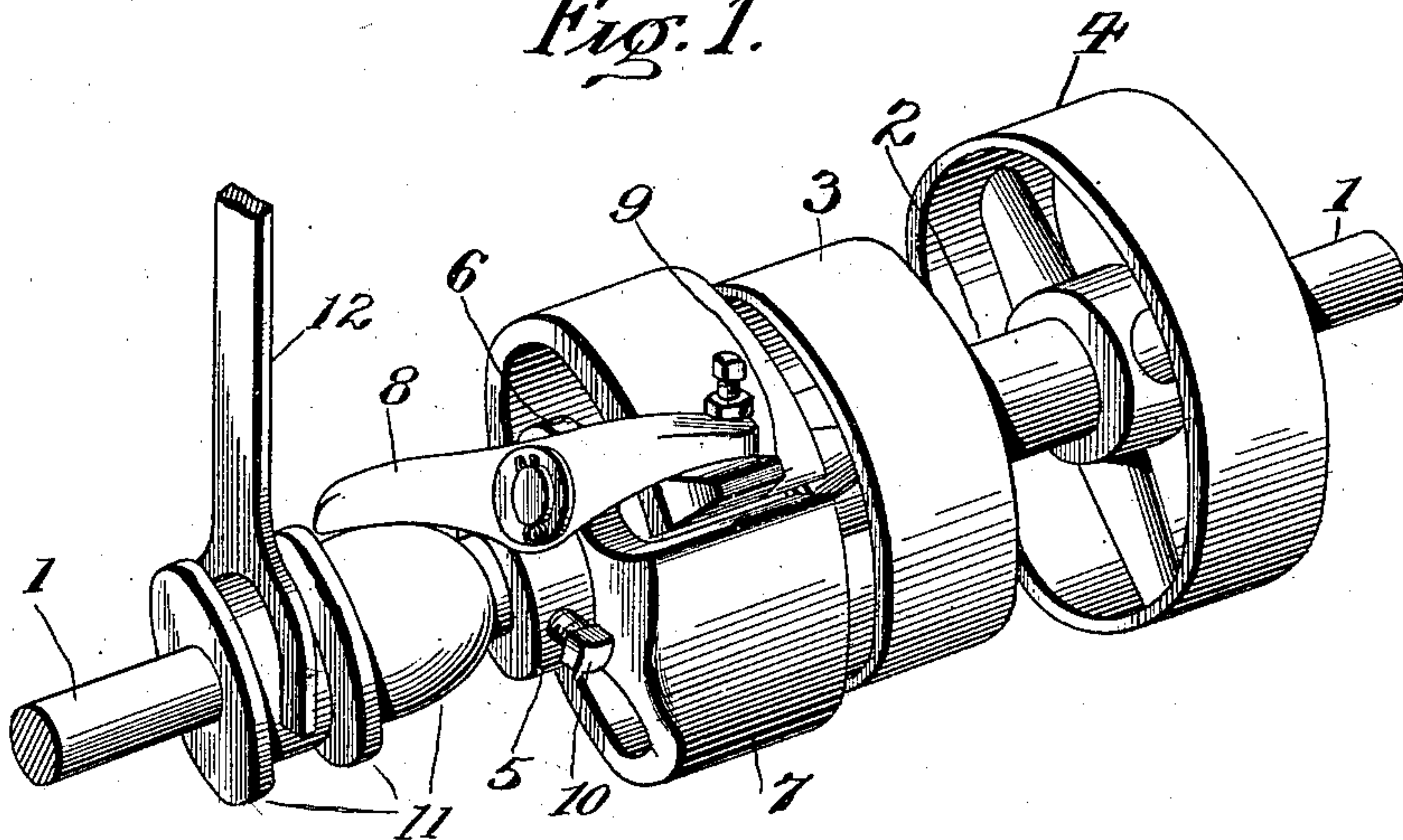


Fig. 2.

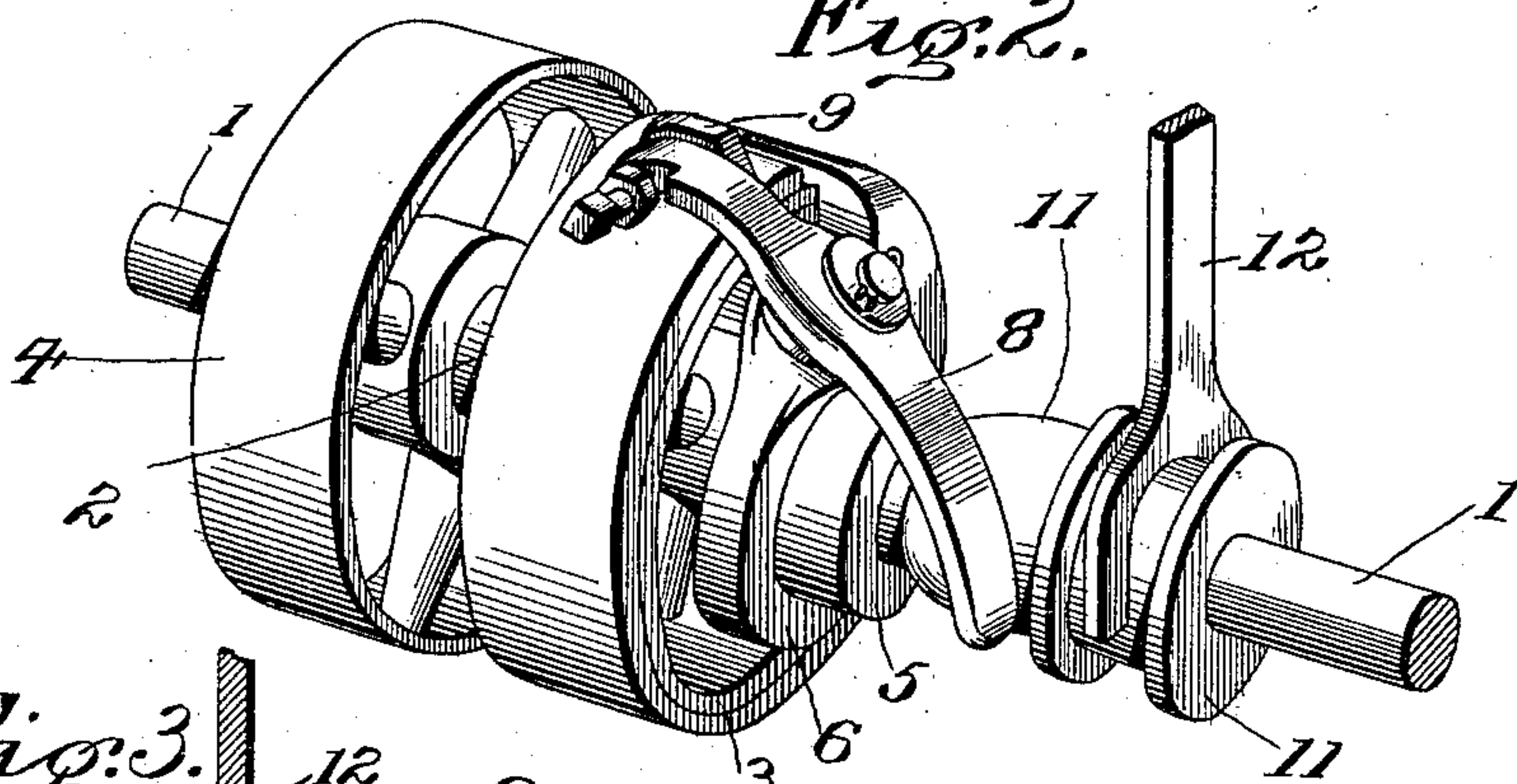
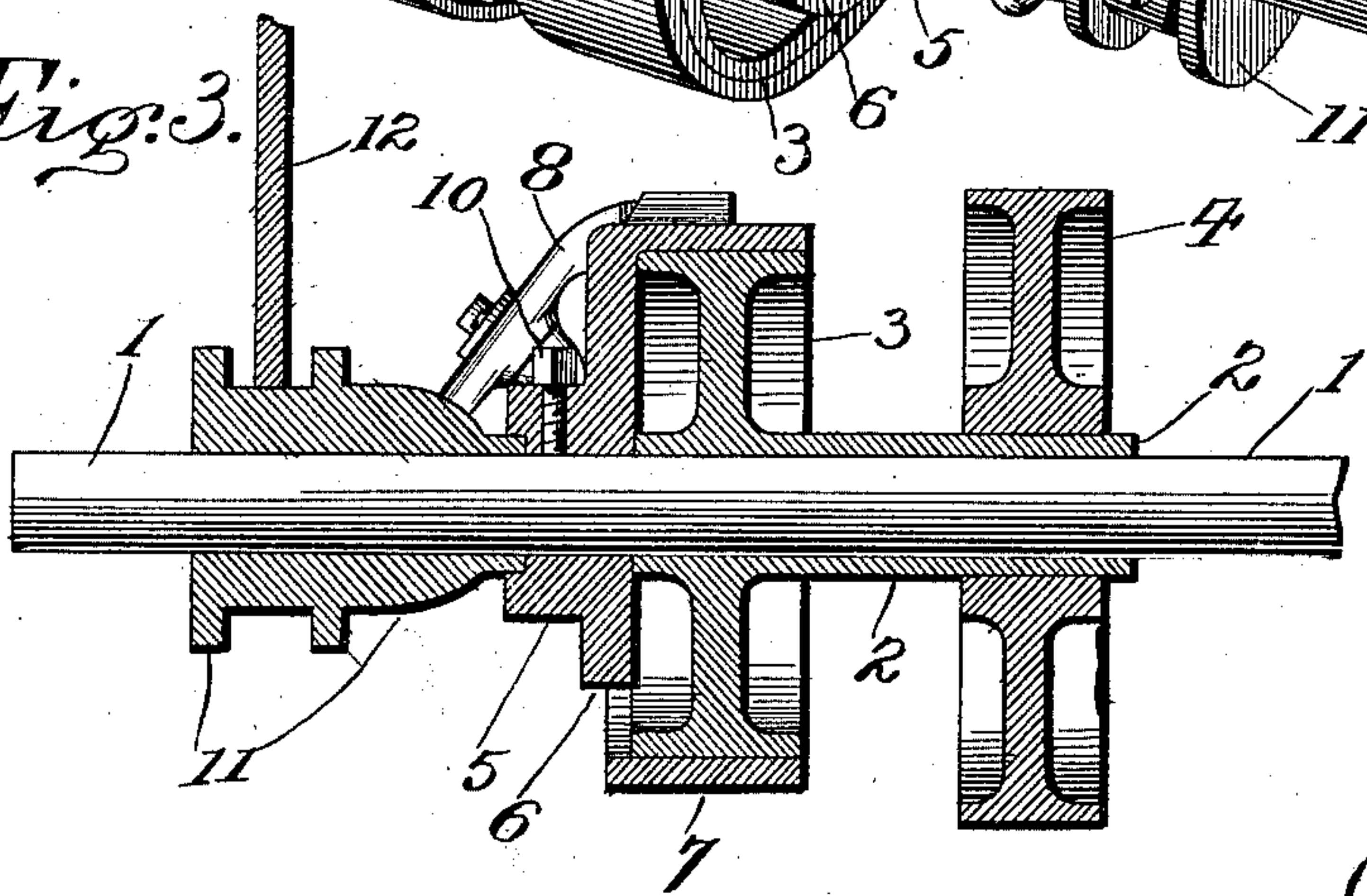


Fig. 3.



Witnesses

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FRICTION-CLUTCH.

SPECIFICATION forming part of Letters Patent No. 666,209, dated January 15, 1901.

Application filed October 18, 1900. Serial No. 33,491. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. RUMSEY, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Friction-Clutches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to friction-clutches for use in connection with shafting, &c.; and it consists, essentially, of the novel construction and arrangement of the several parts, as will be hereinafter more fully described, and particularly stated in the claims.

The principal object of the invention is to simplify and cheapen the cost of construction of the device without in the least impairing its effectiveness or durability.

Other objects will become apparent upon further description of the device.

In the drawings, Figure 1 is a perspective view of my improved friction-clutch, showing the pulley disengaged. Fig. 2 is a similar view showing the pulley in clutched position, and Fig. 3 a longitudinal section.

Referring to these several views, the numeral 1 indicates the shaft, on which is mounted a sleeve 2, carrying a pulley 3. The sleeve is loosely mounted on the shaft and is adapted to move longitudinally thereon. Also mounted on the sleeve is the usual band wheel or pulley 4.

The clutching or gripping mechanism is composed of a hub or collar 5, having a partial flange 6, from which projects a circumferential clutching or gripping band 7. Fulcrumed on the flange 6 is an operating-lever 8, one end of which is adapted to engage and operate against a lug 9 on the free end of the clutch-band, said lever being provided with a set-screw for adjusting the grip and also for taking up wear. The hub, flange, and band are integral, and the hub is secured to the sleeve by means of bolt 10. Mounted loosely

on a shaft is a slidable clutch-operating cone 11, controlled by a suitable lever 12.

The operation of the device is as follows: 50 The sleeve 2 is moved along the shaft until the pulley 3 is received within the clutching-band, which is normally open. The lever 12 is then operated to force the clutch-operating cone against the free end of the lever 8, which 55 will cause the opposite end of said lever to draw the band tight upon the contained pulley, thus effectually locking the two together.

It will be noticed that the lever mechanism in this device is of the simplest possible type 60 and being fulcrumed so as to convey the greatest power it receives and transmits its power direct to the clutch-band. This system of leverage allows of the simplest construction and at the same time permits the greatest 65 amount of clearance to the opposite or gripping part of the clutch.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is— 70

1. The combination with a shaft and a loose pulley, of a friction-clutch composed of a hub or collar provided with a circumferential clutch-band having a lug or projection upon its free end, and mechanism attached to said 75 hub and operating against lug on free end of said band, one end of said mechanism being adapted to be engaged by a clutch-operating device.

2. The combination with a shaft and a loose 80 pulley, of a friction-clutch composed of a hub or collar having a projection provided with a circumferential clutch-band having a lug or projection on its free end, and a lever fulcrumed on the hub projection, one end of said 85 lever operating against lug on the free end of the clutch-band and the other end arranged to be engaged by a clutch-operating device.

3. The combination with a shaft and a loosely-mounted sleeve carrying a pulley secured thereto, of a clutching mechanism composed of a hub or collar carrying a circumferential clutch-band having a lug or projection on its free end, a lever fulcrumed on the hub, 90

one end of said lever operating against lug on the free end of said clutch-band, and a clutch-operating device arranged on the shaft to engage the other end of said lever.

- 5 4. The combination with a shaft and a loose pulley, of a friction-clutch composed of a hub or collar provided with a circumferential clutch-band having a lug or projection on its free end, an operating-lever having its free

end adapted to engage and operate against a projection on the clutch-band, and means for adjusting the grip and for taking up lost wear.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES B. RUMSEY.

Witnesses:

JAMES G. CLONNAY,
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