

No. 832,065.

PATENTED OCT. 2, 1906.

G. B. KELLY.
MUSIC ROLL.

APPLICATION FILED OCT. 13, 1905.

Fig. 1.

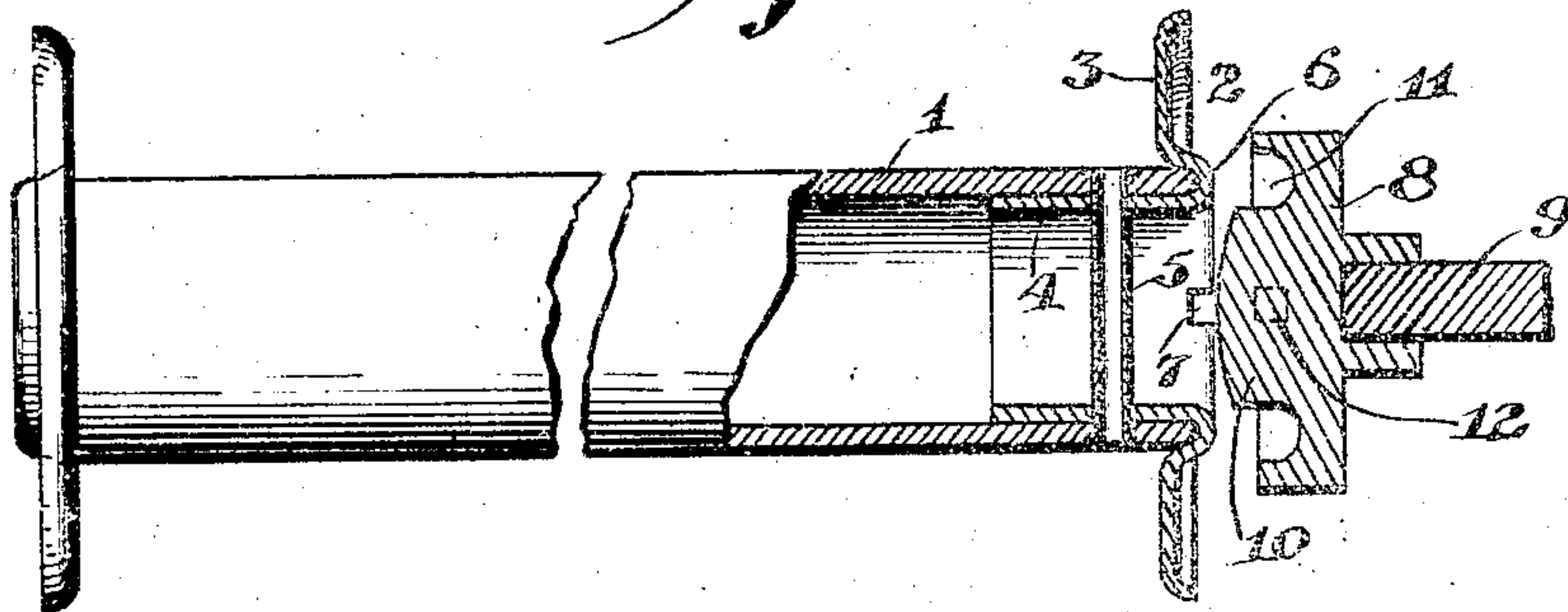


Fig. 2.

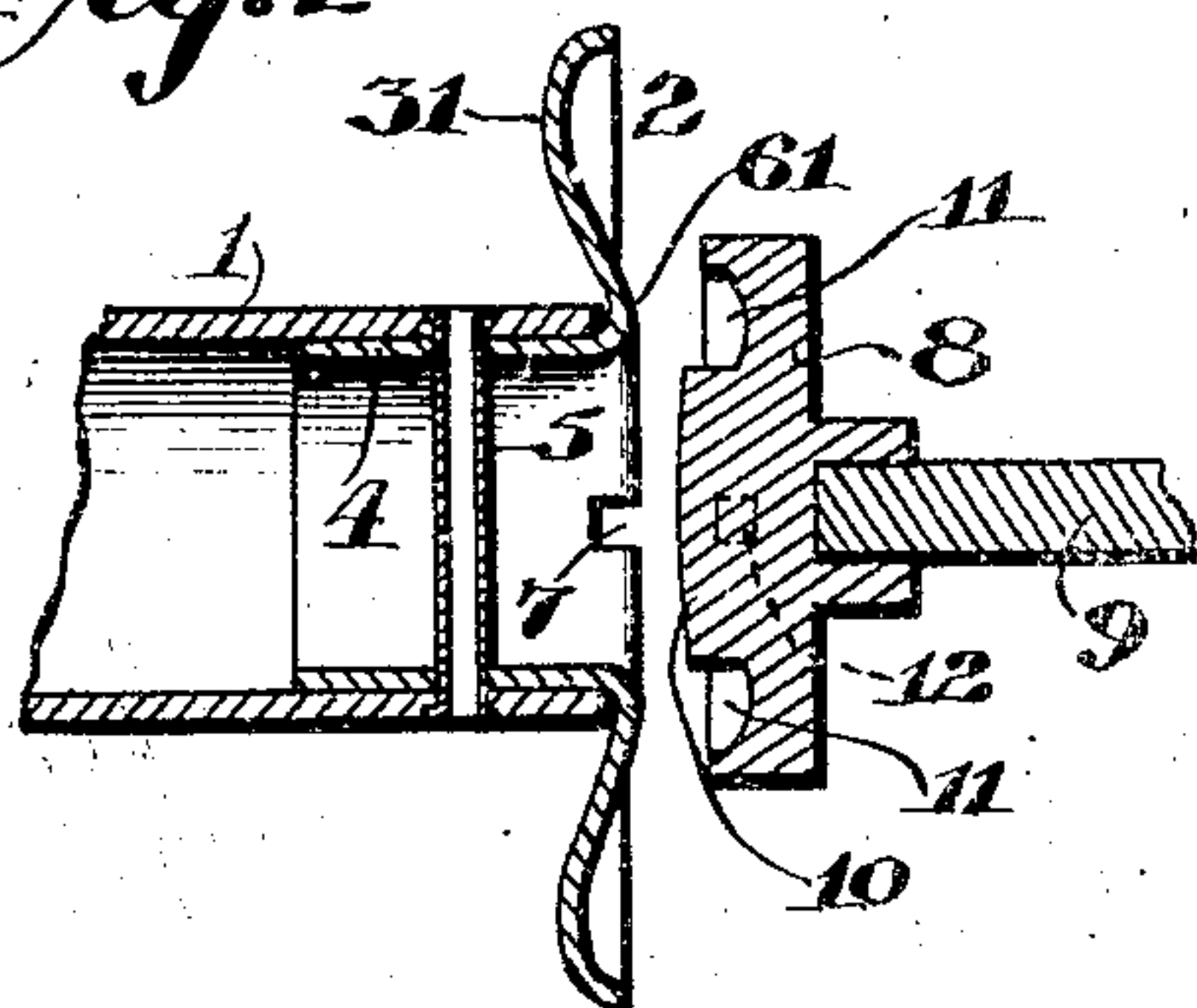


Fig. 3.

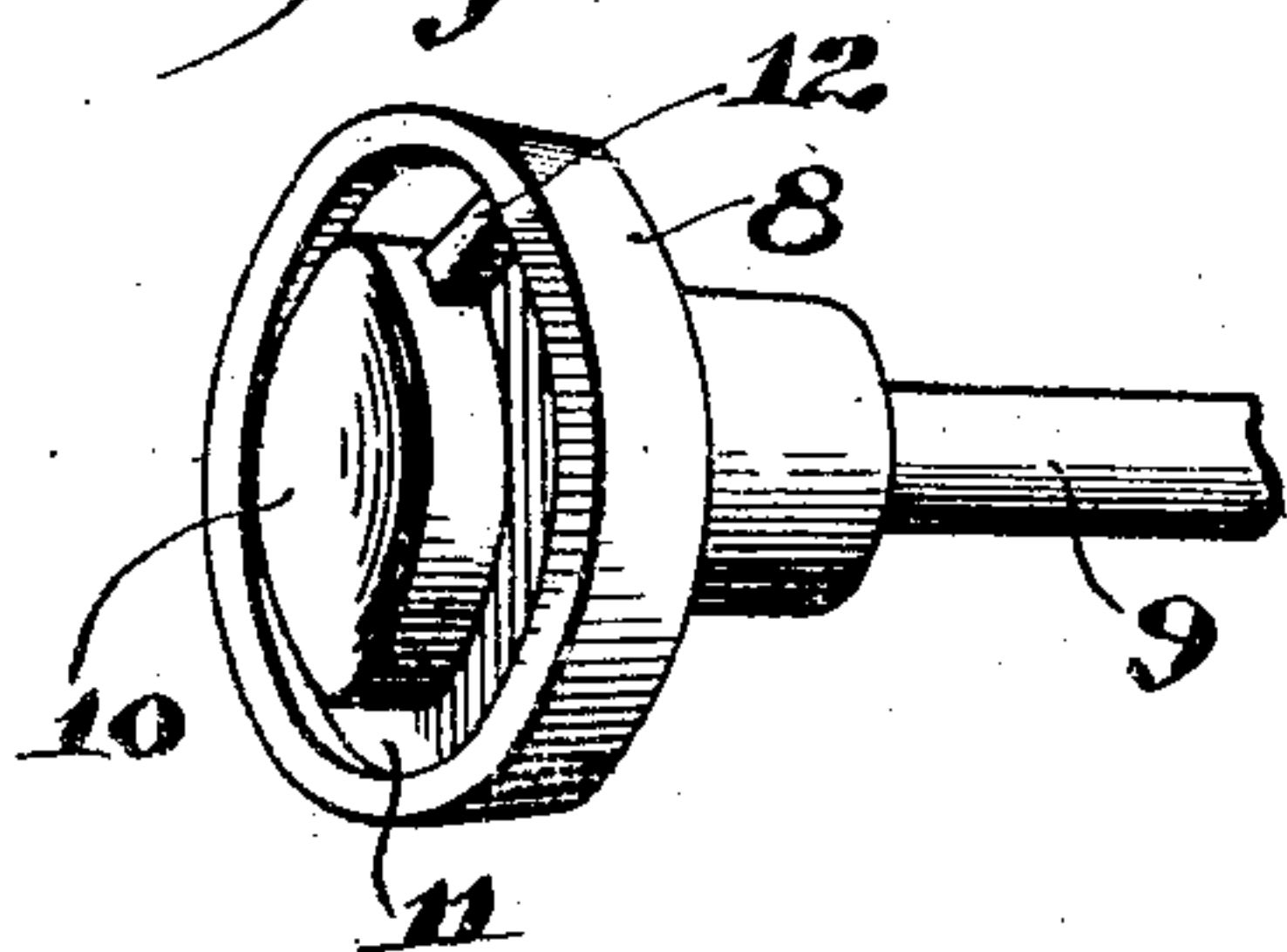
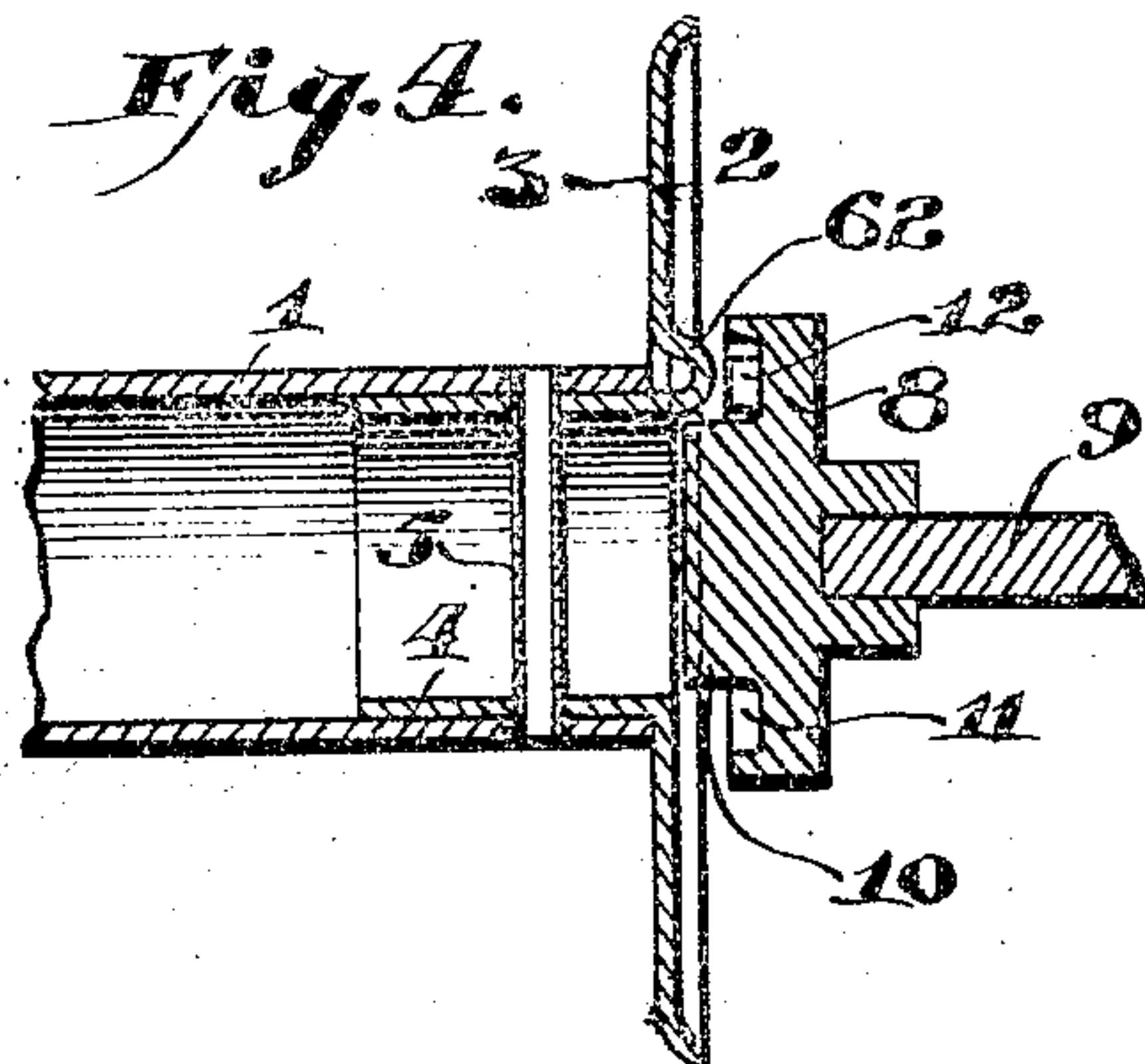


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE B. KELLY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CONNECTICUT.

MUSIC-ROLL.

No. 832,065.

Specification of Letters Patent.

Patented Oct. 2, 1906.

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To all whom it may concern:

Be it known that I, GEORGE B. KELLY, a citizen of the United States, and a resident of Boston, Massachusetts, have invented certain new and useful Improvements in Music-Rolls, of which the following is a specification.

My invention relates to music-rolls such as are used in connection with mechanical musical instruments or mechanical musical-instrument players. Its object is to provide a cheap and durable music-roll which is provided with efficient means for engaging with a coupling by means of which the music-sheet may be rewound on the roll after playing.

It consists of a core having heads or ends consisting of an integral flange, sleeve, and projecting portion forming a clutch member adapted to engage with a cooperating clutch member of the support or coupling.

In the drawings, Figure 1 represents, partly in elevation, partly in vertical section, a music-roll embodying my invention, together with a coupling adapted to cooperate therewith. Fig. 2 is a vertical section of a portion of a modified roll, together with the coupling. Fig. 3 is a perspective view of the coupling alone. Fig. 4 is a vertical section of a further modification of the roll, together with the coupling. Fig. 5 is a perspective view of the end of the music-roll shown in Fig. 4.

For clearness of illustration I have omitted in all the figures the music-sheet, which in practice is secured to and wound upon the core of the roll.

1 designates the core, which may be made of paper, paper-board, or other light and economical material.

2 designates a head or end, having a flanged portion 3, adapted to guide and protect the edges of the music-sheet wound on the core, and a sleeve 4, extending within the core and secured thereto, in the present instance, by a tubular rivet 5. The head 3 is formed with an annular projecting portion 6, which in Fig. 1 of the drawings is so formed as to inclose the end of the core 1. The contour of the annular bead or projection 6 is interrupted or broken by a notch or recess 7, forming opposing walls or shoulders for engaging a clutch-pin or clutch member.

The core is adapted to engage and be ro-

tated by a coupling 8, mounted on the end of a shaft 9, which forms a part of the mechanical instrument or player and is in practice provided with means by which it may be rotated to rewind the music-sheet on the core 1. The coupling 8 is provided with a central projecting portion 10, adapted to fit snugly within the end of the sleeve 4 and with an annular recess 11, adapted to fit over and engage the annulus 6 on the head 2. In the recess 11 is a tooth or projection 12, adapted to engage in the notch or recess 7 in the annulus 6 for rotating the roll.

The modified form of the device shown in Fig. 2 is similar to that shown in Fig. 1, except that the annular projection 61 on the head 2 does not inclose the end of the core 1, and the flange 31 is slightly different in shape from that shown in Fig. 1. It is obvious that the recess 11 in the coupling 8 is preferably made to fit snugly over the annulus 61, as before described.

In the form of the device shown in Figs. 4 and 5 of the drawings the head 2 is unprovided with an annular portion, but has a clutch-engaging projection 62, forming, as in the previously-described case, a shoulder adapted to engage with the pin or projection 12 in the coupling 8 as before. Of course in this form of the device there may be a certain amount of lost motion when the coupling is rotated until the pin 12 engages with the projection 62 to rotate the roll.

The head 2 will usually be formed of sheet metal or of some other durable material, while the core 1 may be made, as above described, of paper or a relatively cheap article. It is of course unessential that the core should be hollow throughout, as shown.

What I claim is—

1. In combination with a driving clutch member of a mechanical musical apparatus having a central projection and a curved recess provided with a tooth or projection, a music-roll adapted to be connected thereto and having a hollow end and a combined flange and sleeve secured thereto and provided with a projection which is received in said recess and is formed with a shoulder which engages with said tooth or projection, the said central projection of the clutch being received by the hollow portion of said end.

2. A music-roll having a core and an end flange secured thereto, said end flange having

an integral sleeve extending into the roll and forming an open center, and a longitudinally-extending projection adjacent to said open center for substantially the purposes set forth.

5 3. A music-roll having a core and an end flange secured thereto, said end flange having an integral sleeve extending into the roll and forming an open center, and a longitudinally-extending projection in the form of an inter-

rupted annulus adjacent to said open center 10 for substantially the purposes set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORGE B. KELLY.

Witnesses:

W. C. MANSFIELD,
D. C. HEINS.