

No. 765,522.

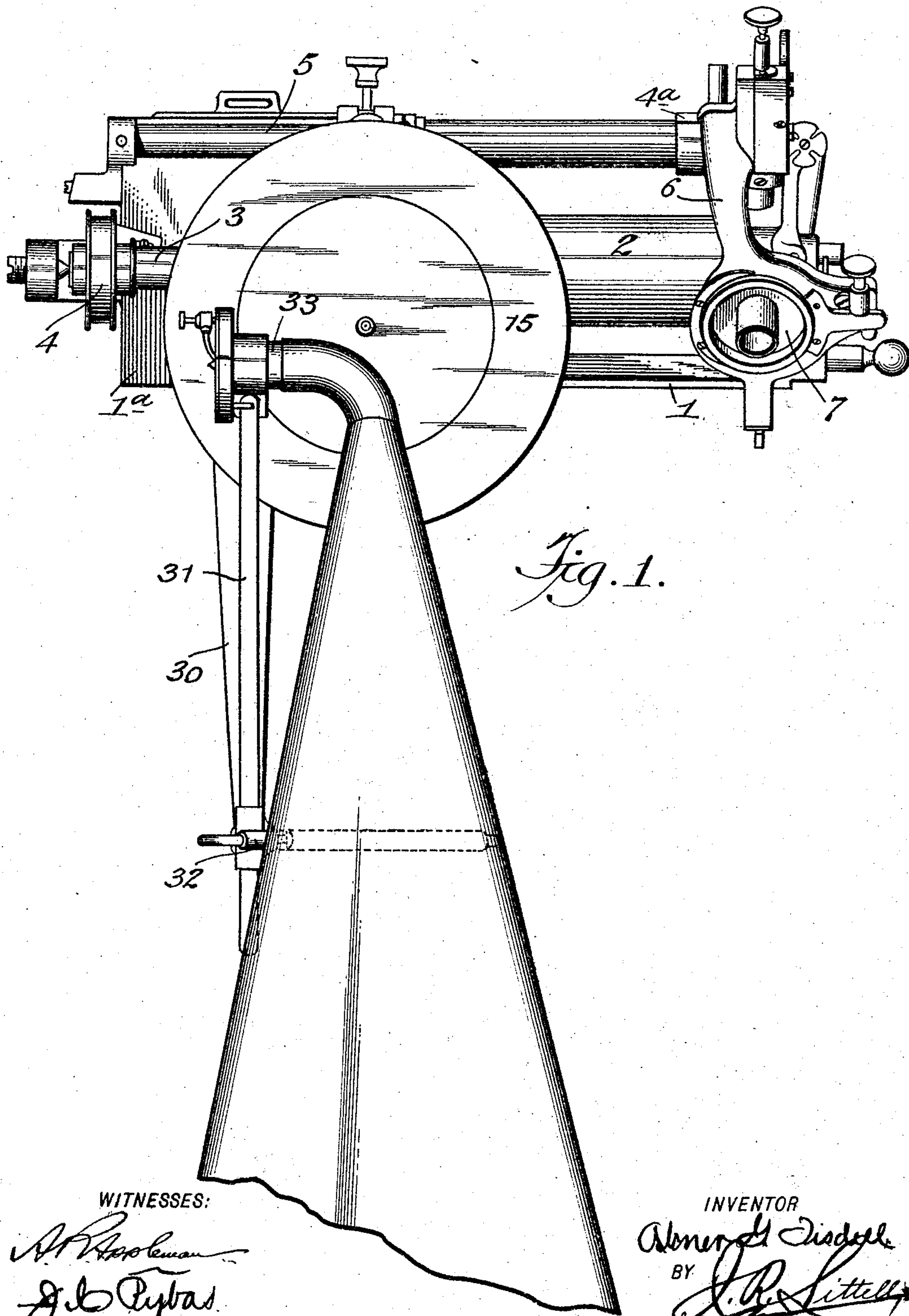
PATENTED JULY 19, 1904.

A. G. TISDELL.  
MACHINE FOR REPRODUCING SOUND.

APPLICATION FILED OCT. 20, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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INVENTOR

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No. 765,522.

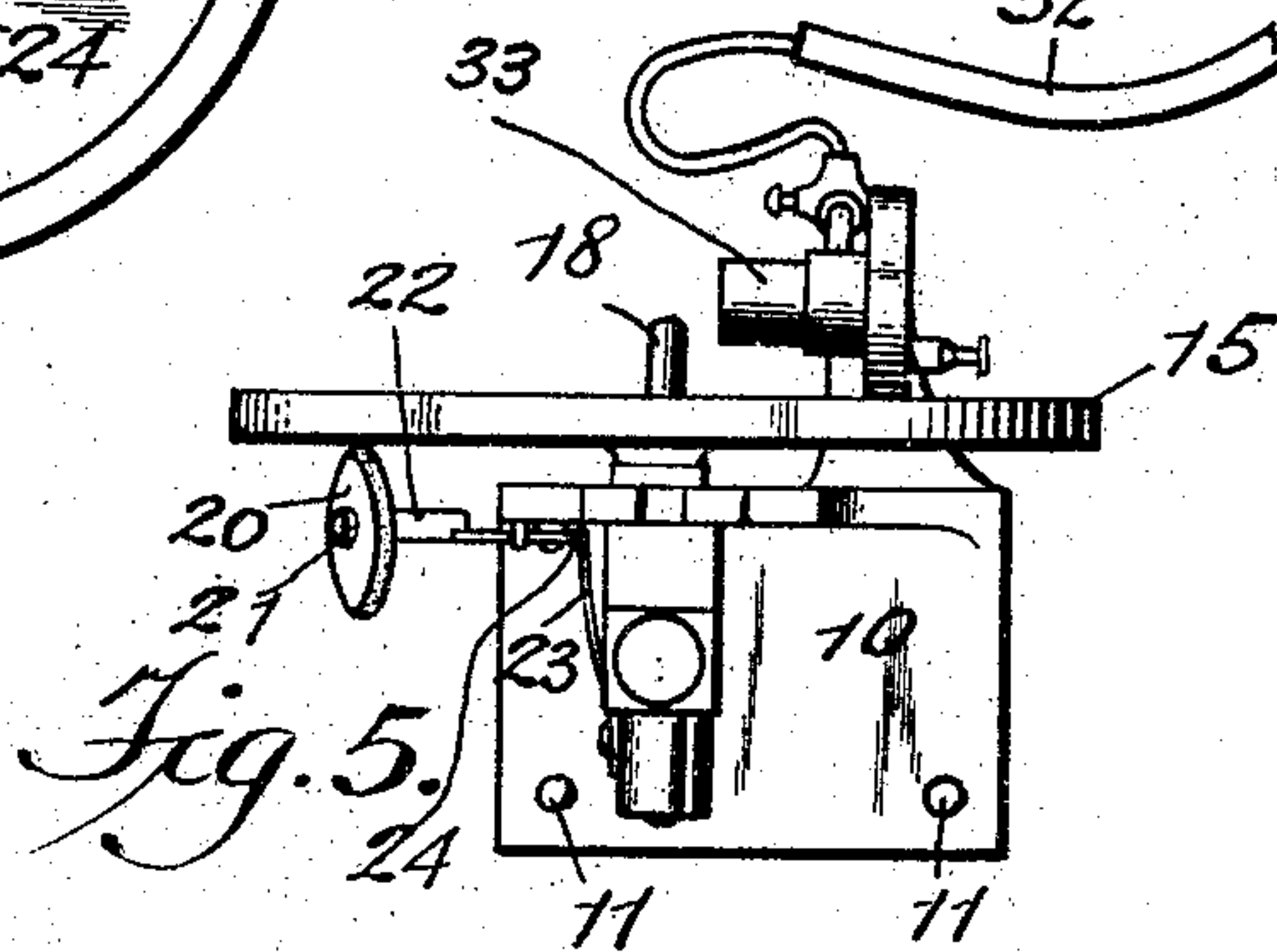
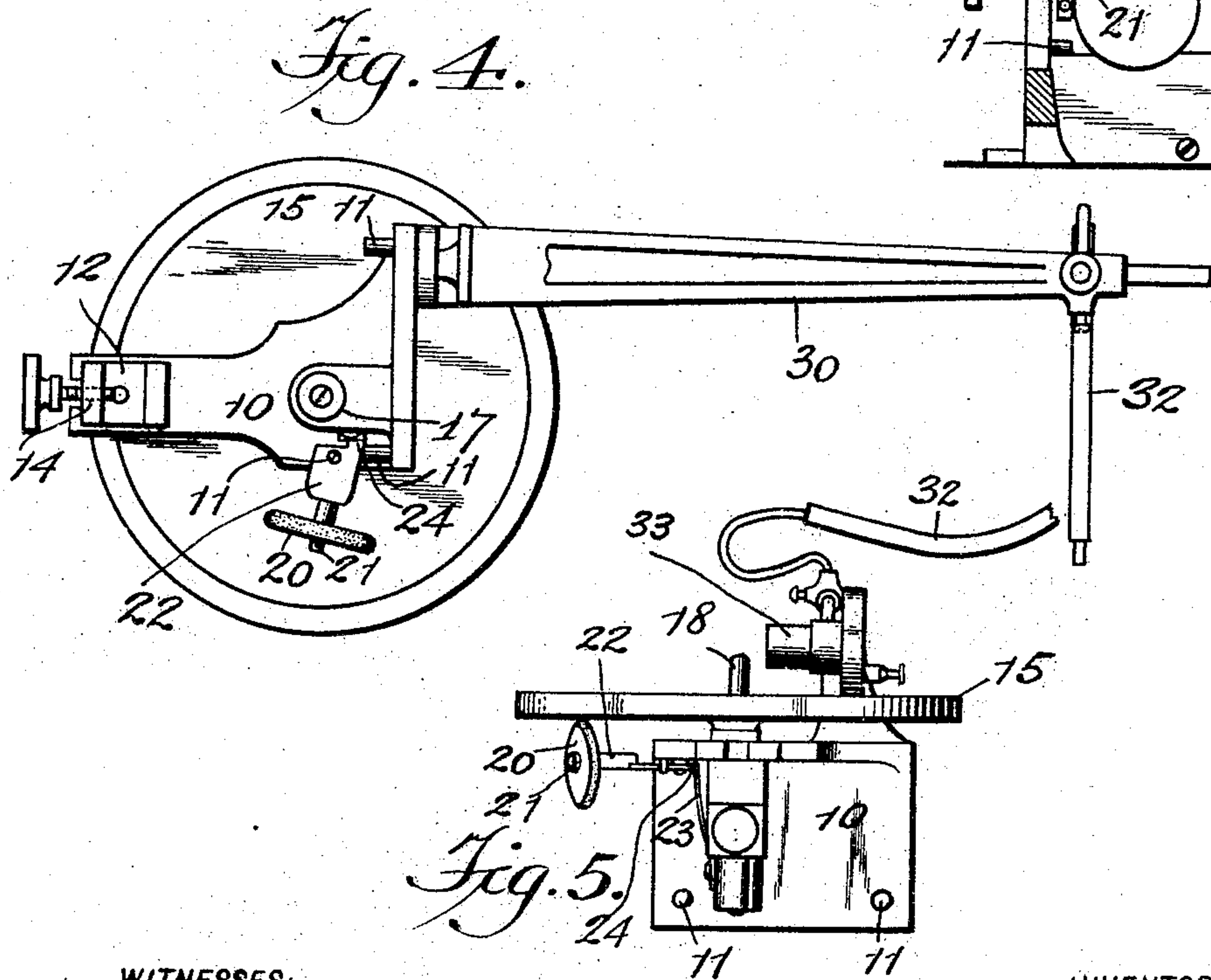
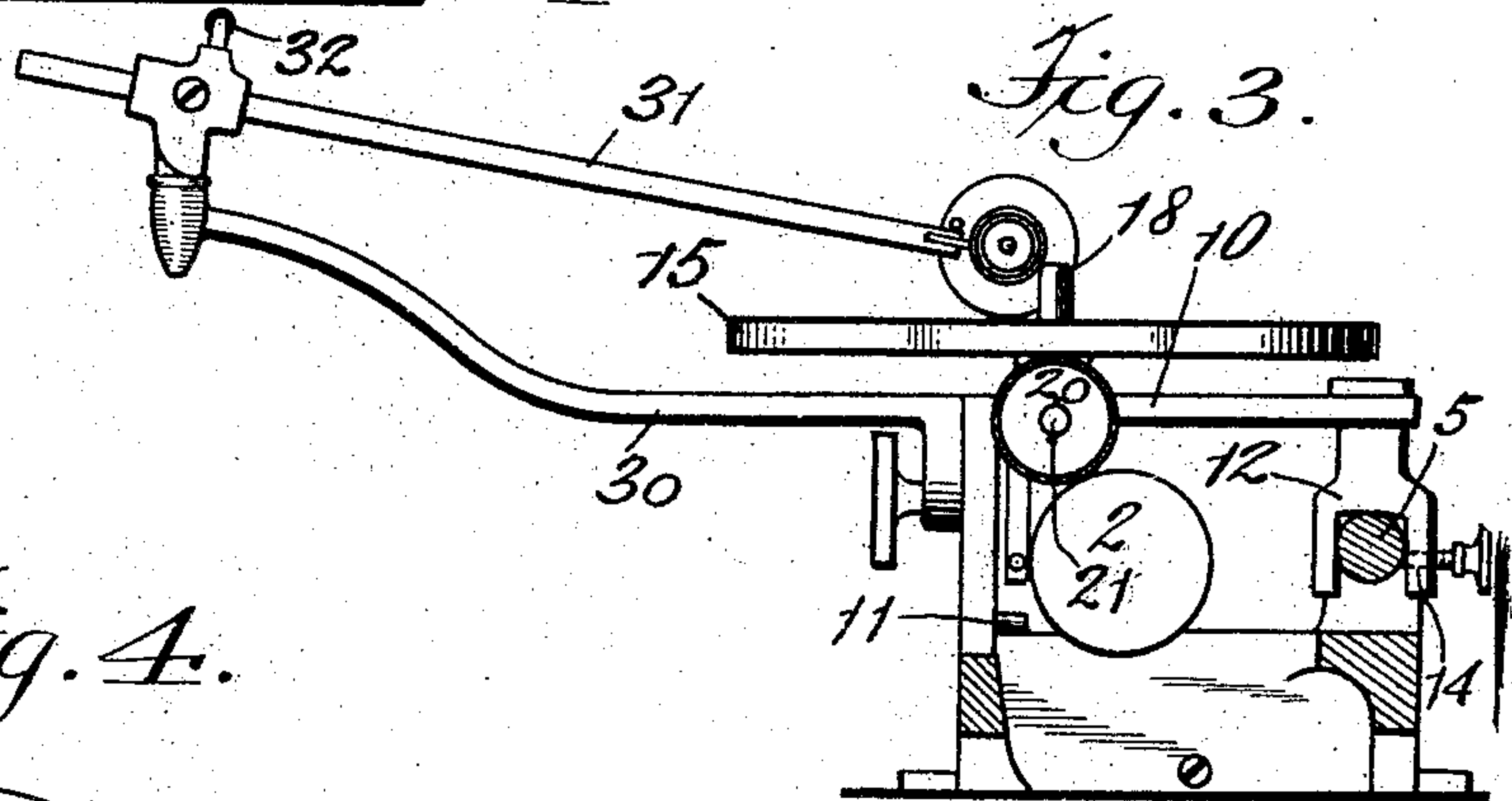
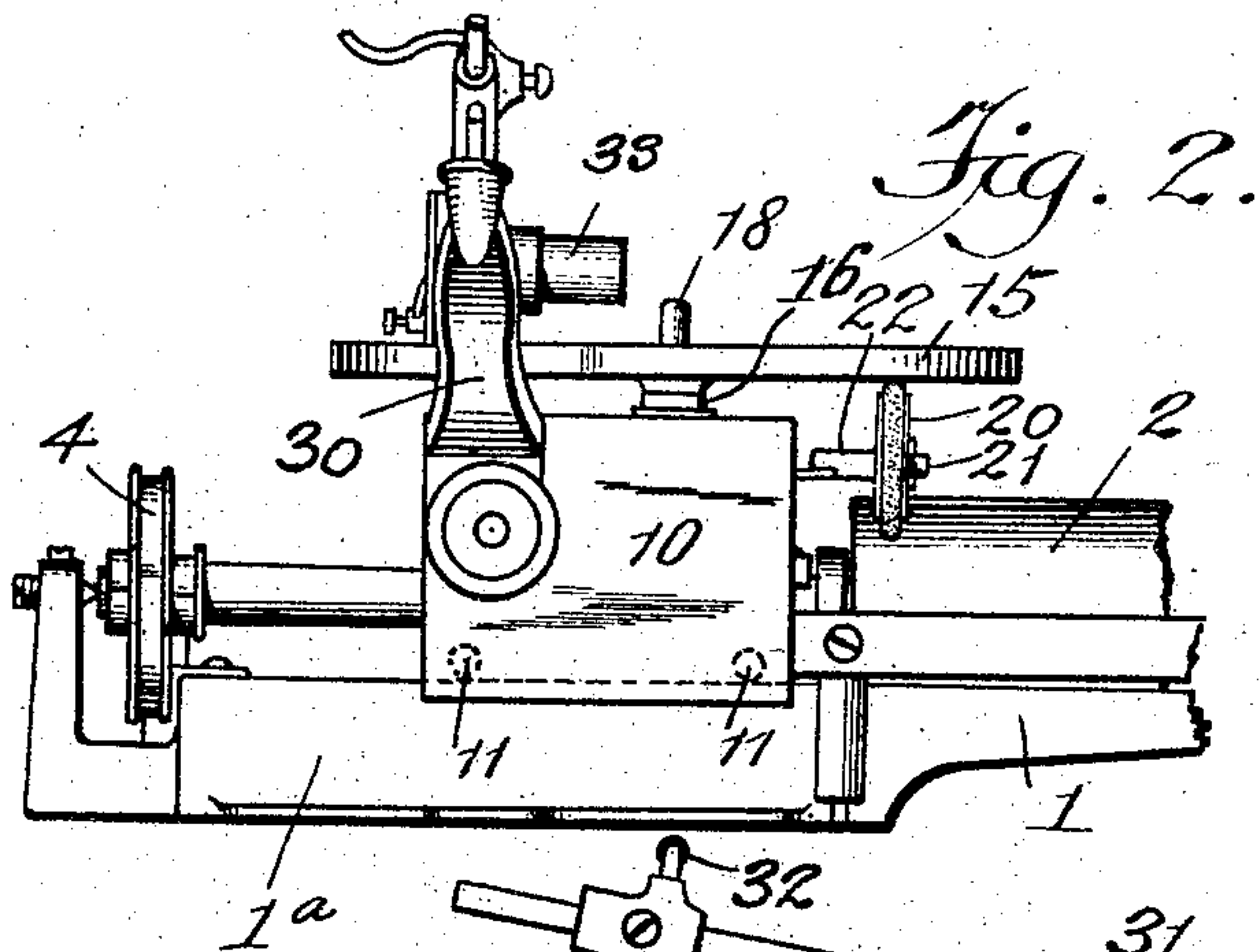
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NO MODEL.

2 SHEETS—SHEET 2.



WITNESSES:

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*J. B. Pybas*

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# UNITED STATES PATENT OFFICE.

ABNER G. TISDELL, OF BROOKLYN, NEW YORK.

## MACHINE FOR REPRODUCING SOUND.

SPECIFICATION forming part of Letters Patent No. 765,522, dated July 19, 1904.

Application filed October 20, 1903. Serial No. 177,772. (No model.)

*To all whom it may concern:*

Be it known that I, ABNER G. TISDELL, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Machines for Reproducing Sound, of which the following is a specification.

My invention relates to machines for reproducing sound.

It has for its object to provide an attachment for sound-reproducing machines—such, for instance, as the Edison phonograph or similar machines—to adapt them to play disk records as well as the usual cylindrical record.

It has for a further object to provide a device of the character described possessing advantages in point of simplicity, cheapness, perfect operation, and general utility.

In the drawings, Figure 1 is a plan view of an Edison phonograph having my device attached. Fig. 2 is a front view, one end being broken away. Fig. 3 is an end view, one end being broken away. Fig. 4 is a bottom plan view of my attachment, and Fig. 5 is a rear view.

In referring to the drawings, as I have shown my device attached to an Edison phonograph, the construction and operation of which is well known, it will only be necessary to mention certain parts and in a general way.

1 and 1<sup>a</sup> designate the base of the phonograph; 2, the mandrel mounted on an operating-shaft 3, having a pulley 4 for the transmission of power thereto; 4<sup>a</sup>, the reciprocal carriage mounted on the guide 5, and 6 the arm thereon carrying the diaphragm 7.

Referring now particularly to my attachment, 10 designates a bracket secured on the base of the phonograph by lugs 11, which rest on the part 1<sup>a</sup> of the base, and a forked arm 12, which straddles the guide 5 and is provided with a clamping-screw projecting through a screw-threaded hole 14 in one arm thereof in engaging with said guide. A circular plate 15 for supporting the disk records is rotatably mounted on said bracket 10 by means of a spindle 16, projecting from the under side thereof and journaled in a bearing 17 thereon, and said plate is also provided with

a spindle 18, projecting from the upper side thereof, arranged to engage a hole in the disk records to hold them on the plate 15.

For the purpose of rotating the plate 15 from the mandrel 2 a friction-wheel 20 is journaled on a spindle 21 on the outer end of an arm 22, pivoted on the bracket 10 at 11 in engagement with the under side of the plate 15 and held in engagement with the surface of one end of the mandrel 2 by a leaf-spring 23, engaging a nose 24 on the inner end of the arm 22.

It will be seen from the drawings that the friction-wheel 20 is wedged between the circular plate 15 and spindle 2 by the spring 23 when the spindle is revolved to the right, and thus transmits motion to the plate 15, and that said spring allows the friction-wheel to be forced out of contact with the plate 15 by the spindle 2 when said spindle is revolved in the reverse direction, thus allowing said plate to remain still.

An arm 30 is secured to the front part of the bracket 10 and receives the outer end of the arm 31, on the inner end of which the diaphragm is mounted, and also receives one end of a support 32 for the outer end of the horn, the inner end of the horn slipping over the sleeve 33 on the diaphragm.

The operation is as follows: When the mandrel 2 is revolved to the right, the friction-wheel 20 is drawn thereby between it and the plate 15, transmitting rotary movement to said plate, and consequently to the disk-record plate; but when the mandrel is revolved in the reverse direction it forces the friction-wheel away from the circular plate 15, allowing it to remain at rest and consequently the disk-record plate remains at rest. As the attachment is removable, if it be desired to play the cylindrical record instead of the disk record the screw 13 is loosened and the device taken off.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of that construction and arrangement without departing from the spirit and scope of my invention



and improvements. I therefore reserve the right to all such variations and modifications as properly fall within the scope of my invention and the terms of the following claims.

5 Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A machine for reproducing sound having a rotary disk-record-supporting plate, a rotary cylinder, and means supported inde-  
10 pendent of said rotary cylinder and in contact therewith and with the record-supporting plate for rotating said record-supporting plate, substantially as described.

2. A machine for reproducing sound having  
15 a rotary disk-record-supporting plate, a rotary cylinder, and a rotary wheel supported independently of the rotary cylinder and in contact therewith and with the record-supporting plate for rotating said record-sup-  
20 porting plate, substantially as described.

3. A machine for reproducing sound having a rotary disk-record-supporting plate, a rotary cylinder, and a rotary spring-pressed wheel supported independently of the rotary  
25 cylinder and in contact therewith and with the record-supporting plate, for rotating said record-supporting plate, substantially as described.

4. A machine for reproducing sound having  
30 a rotary disk-record-supporting plate, a ro-

tary cylinder, and means supported inde-  
pendently of said rotary cylinder and in con-  
tact therewith and with the record-supporting  
plate adapted to rotate said record-supporting  
plate when the cylinder is turned in one di- 35  
rection and to allow said record-supporting  
plate to remain at rest when the cylinder is  
turned in the reverse direction, substantially  
as described.

5. A machine for reproducing sound having 40  
a rotary disk-record-supporting plate, a ro-  
tary cylinder, a pivoted reciprocatory arm  
and a wheel journaled on said arm and in con-  
tact with said cylinder and with the record-  
supporting plate for rotating said record-sup- 45  
porting plate, substantially as described.

6. A machine for reproducing sound having  
a removable bracket a rotary disk-record-sup-  
porting plate mounted thereon a rotary cylin-  
der, a reciprocatory arm pivoted on said 50  
bracket, and a wheel journaled on said arm  
and in contact with said cylinder and the rec-  
ord-supporting plate, for rotating said record-  
supporting plate, substantially as described.

In testimony whereof I have signed my name 55  
in the presence of the subscribing witnesses.

ABNER G. TISDELL.

Witnesses:

J. C. PYBAS,

L. E. DUANE.