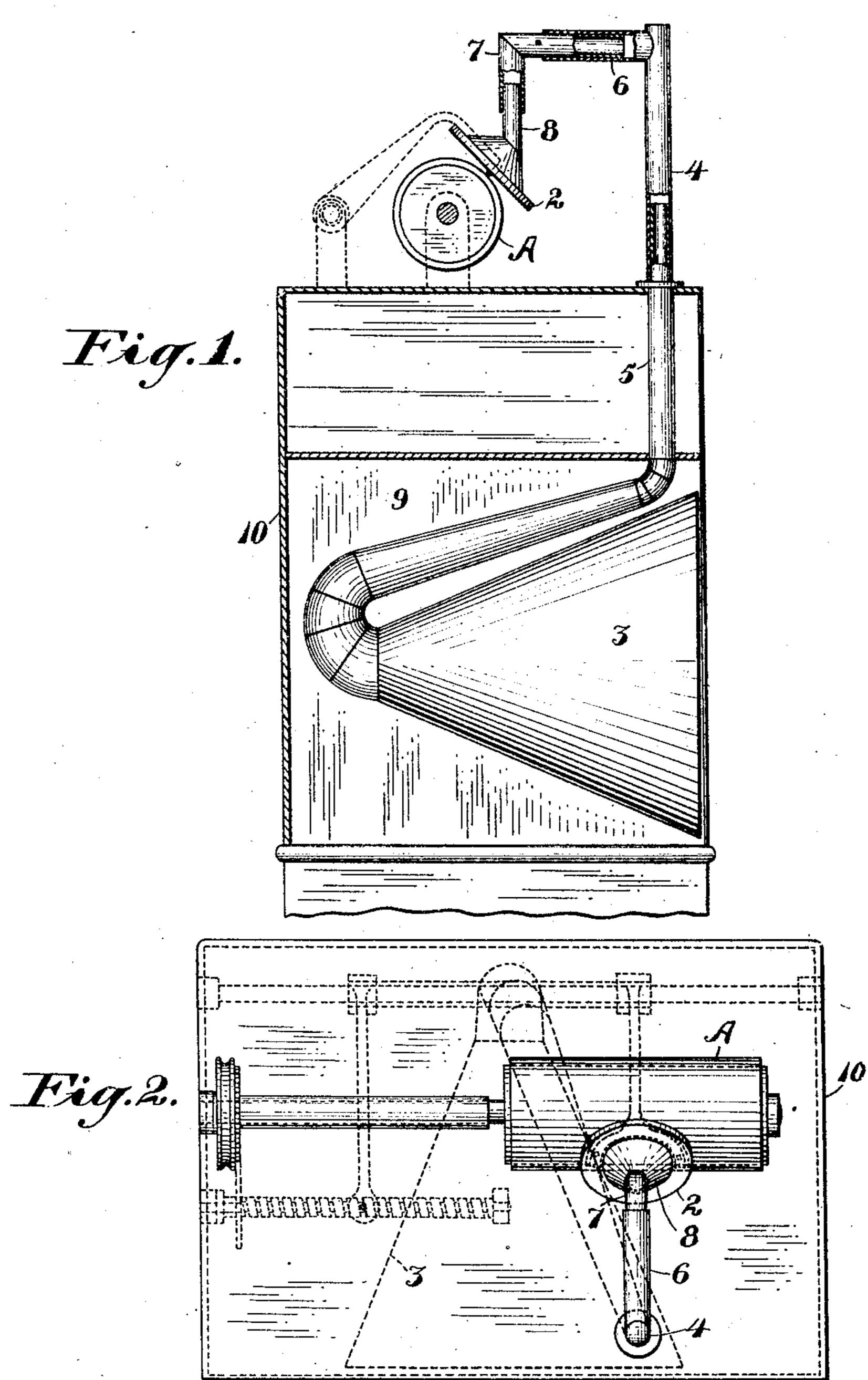
G. SHEPHARD. PHONOGRAPH HORN ATTACHMENT. APPLICATION FILED JULY 24, 1908.

912,039.

Patented Feb. 9, 1909



WITNESSES

I. E. Fliedner Læbenfield Leorge Shephard
BY Goodb Shong:
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UNITED STATES PATENT OFFICE.

GEORGE SHEPHARD, OF PETALUMA, CALIFORNIA, ASSIGNOR OF ONE-THIRD TO J. N. WHITE AND ONE-THIRD TO J. H. ANDREWS, OF PETALUMA, CALIFORNIA.

PHONOGRAPH HORN ATTACHMENT.

No. 912,039.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed July 24, 1908. Serial No. 445,187.

To all whom it may concern:

Be it known that I, George Shephard, a British subject, residing at Petaluma, in the county of Sonoma and State of California, bave invented new and useful Improvements in Phonograph Horn Attachments, of which the following is a specification.

My invention relates to an attachment to talking machines and pertains especially to a means of connecting the horn with the re-

producer.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is an elevation in partial section of a talking-machine, showing the invention.

Fig. 2 is a plan view of the same.

A represents the reproducing cylinder of a well-known type of talking machine, and 2 is a reproducer provided with the usual stylus to travel in the grooves of the reproducing cylinder in a manner well understood in the art. Suitable means, not necessary here to be shown but also well known, are employed to revolve the cylinder to cause the reproducer to traverse the record endwise.

30 3 is a horn here shown as housed in chamber 9 of the talking machine casing 10. The horn is supported in any suitable fashion, and in its present arrangement I connect the reproducer with the horn by the following means: A tubular section 4 is adapted to have a telescopic sliding fit with the vertical end section 5 at the small end of the horn. Section 4 has a right angle tubular extension 6 in which an elbow 7 is slidable and

to it an elbow 8 with its free end telescoping the corresponding end of the elbow 7. The joints between elbows 7 and 8 and sections 4 and 5 are parallel so as to give horizontal flexibility, and the slip joint between elbows

flexibility, and the slip joint between elbows 6 and 7 provides for vertical adjustment and for the necessary extension of the part

6 and 7 in the lengthwise travel of the reproducer along the cylinder A. In other words, the reproducer while always moving 50 rectilinearly and the section 4 pivoting onto section 5, the horn always remains stationary. By this arrangement I get the horn out of sight and out of the way, add to the neatness, appearance, compactness of the maschine, and avoid danger of damaging the records as sometimes now occurs by the careless handling of or contact with the horn.

It is manifest that the invention is applicable to records of the disk type as well as to 60

the cylindrical form here shown.

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

1. The combination with the reproducer 65 of a talking machine, and a stationary horn, having a vertically disposed end section, of a tubular section telescopically fitting the end section of the horn and having a right-angled extension, and a flexible connection 70 between said right-angled extension and the reproducer adapted to permit the reproducer to move rectilinearly while the horn remains stationary.

2. The combination with the reproducer 75 of a talking machine a record and a stationary horn, said horn having a vertical end section, of a tubular section telescopically fitting the end section of the horn and having a right-angled extension, an elbow having a horizontal portion telescopically fitting said right-angled extension and having a vertical portion to which the reproducer is telescopically fitted whereby said reproducer may move rectilinearly while the horn remains stationary.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE SHEPHARD.

Witnesses:

WM. B. HASKELL, MABEL MATZENBACH.