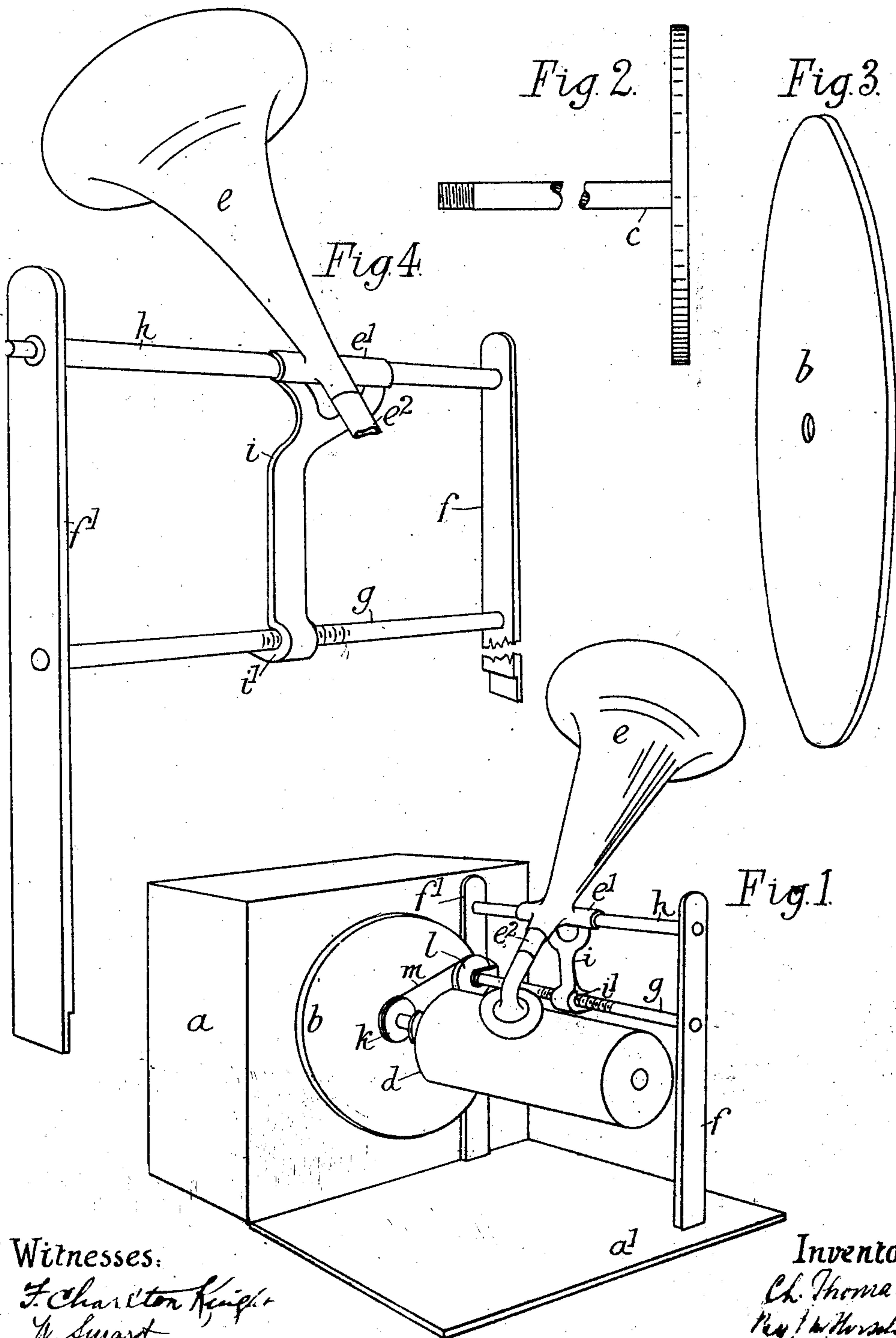


No. 842,982.

PATENTED FEB. 5, 1907.

C. THOMAS.
TALKING MACHINE.
APPLICATION FILED DEC. 15, 1905.



Witnesses:

F. Charleston Knight
W. Stuart

Inventor:

Ch. Thomas
Per J. W. Marshall
att'y

UNITED STATES PATENT OFFICE.

CHARLES THOMAS, OF NEWTON ABBOT, ENGLAND.

TALKING-MACHINE.

No. 842,982.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed December 15, 1905. Serial No. 291,840½.

To all whom it may concern:

Be it known that I, CHARLES THOMAS, a subject of the King of England, residing at Newton Abbot, Devon, England, have invented new and useful Improvements in Talking-Machines, of which the following is a specification.

My invention has for its object the provision of certain mechanical devices which will enable a gramophone or disk-recording machine to be readily used for producing phonograph or cylinder records.

The accompanying drawings show how I carry the invention into effect.

Figure 1 is a perspective view of a combined gramophone and phonograph provided with a frame carrying the horn and an Edison worm. Fig. 2 is a side view of the turn-table. Fig. 3 is a perspective view of a record-disk. Fig. 4 shows a separate view of the frame.

Similar letters refer to similar parts throughout the several views.

With the object in view I take an ordinary gramophone provided with the usual case *a* containing the internal driving mechanism, a cover *a'*, and record-disk *b*. To the turn-table *c* is fixed a stem having a screw-threaded outer end, to which the mandrel *d* is secured, so that the latter is operated direct by and with the turn-table.

The mechanism which enables me to use the same horn *e* and an appropriate support therefor without removing any parts from or attaching same to the apparatus for operating with a disk or a cylinder consists of a frame constructed of two standards *f f'*, fitted with an Edison worm *g* and a guide-spindle *h*. The horn *e* is fitted with a sleeve *e'*, capable of sliding along the spindle *h*. Connected with said sleeve is an arm *i*, whose free end *i'* is formed into a screw-threaded claw to mesh with the worm *g* and be driven thereby, the worm receiving motion from the turn-table *c* through the intervention of pulleys *k* and *l* and driving-strap *m*. The frame is mortised in the open lid *a'* of the box, and the guide-spindle *h* projects into a hole in the top of the box *a*. The standard *f'* is disposed underneath the turn-table.

For use as a phonograph the apparatus is turned on edge, as indicated in Fig. 1, so as to place the cylinder in a horizontal position. The horn *e* and its arm *i* are so adjusted as to insure the necessary contact of the recorder or reproducer with the cylinder. For further security I connect the reproducer with the horn by a rubber sleeve or socket *e''*.

When using the apparatus as a gramophone, the box *a* is placed in its normal position, the strap *m* is thrown off, and the sleeve of the horn is allowed to come on to the inner face of the standard *f'*, while the claw *i'* is disengaged from the worm *g*. The reproducer is then adjusted upon the face of the disk. It is to be mentioned that the sleeve *e'* is of such a length as to suit the position of the reproducer on the disk.

I am aware that prior to my invention, convertible phonographs and gramophones have been made, but the mechanisms provided for the purpose consisted of separate or additional means that required detaching and readjusting in different positions for use with each type of apparatus, while by my invention the same parts will serve throughout in substantially the same position, the distinguishing feature being that the mechanism in its normal position serves as gramophone, but being converted for use as a phonograph by standing on edge. I therefore do not claim the combination of the two types of machine broadly; but

What I do claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. A convertible gramophone and phonograph comprising a gramophone turn-table, a spindle upon which said turn-table rotates, a phonograph-mandrel detachably mounted upon said spindle, a reproducer for operation relatively either of said parts and means for feeding said reproducer, as set forth.

2. In a convertible gramophone and phonograph, the combination with a gramophone turn-table, its spindle and detachable phonograph-mandrel mounted on said spindle, of a frame comprising two standards secured in the cover of the phonograph-box, an Edison worm journaled in said standards, a guide-

spindle fixed in the standards, a horn having
a sleeve mounted on said guide-spindle, a
claw-arm fast on the horn and engaging the
Edison worm, a reproducer at the end of the
5 horn, and gear for driving the Edison worm
from the turn-table, as set forth.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

CHARLES THOMAS.

Witnesses:

W. J. HOLE,
E. J. EDMONDS.