

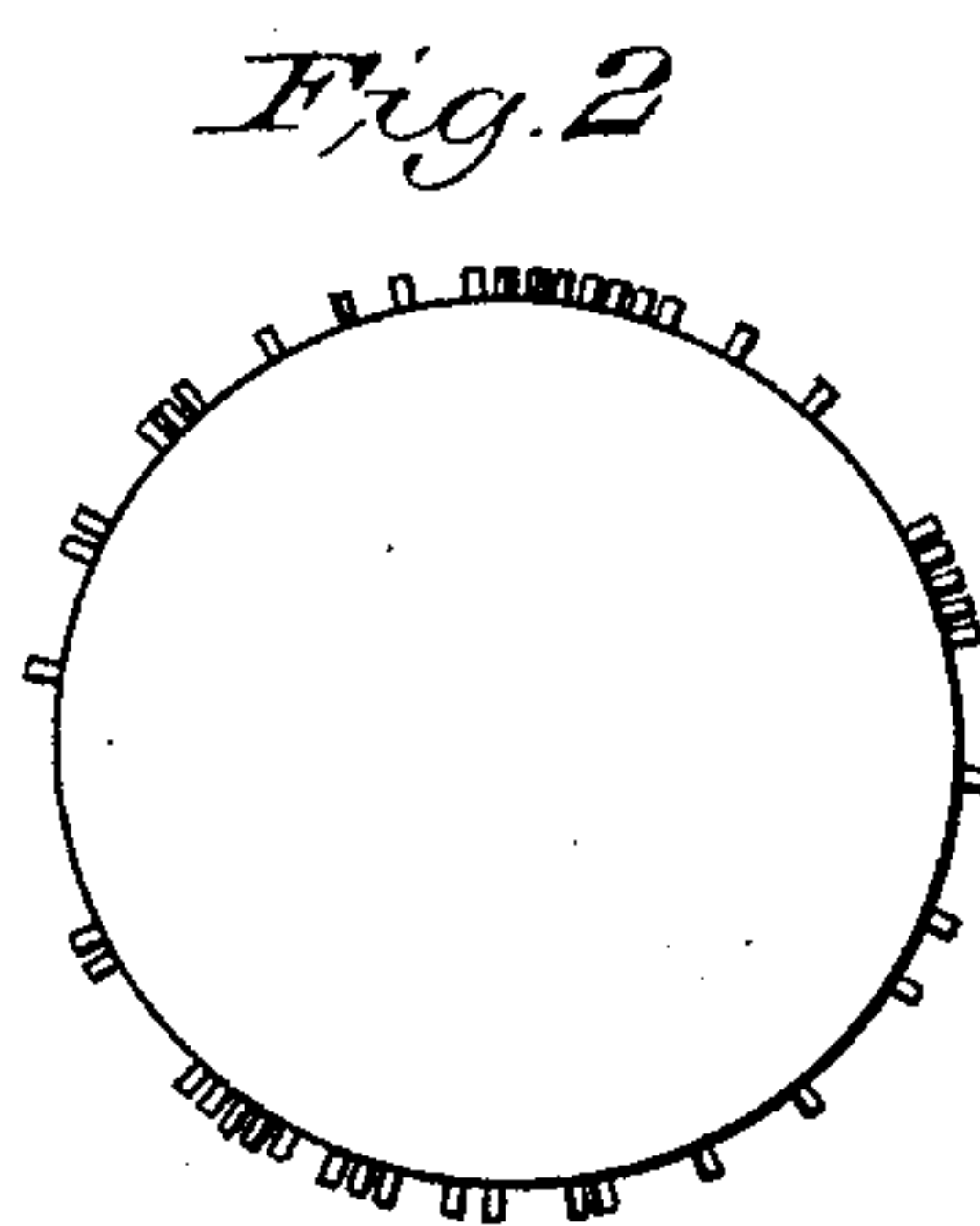
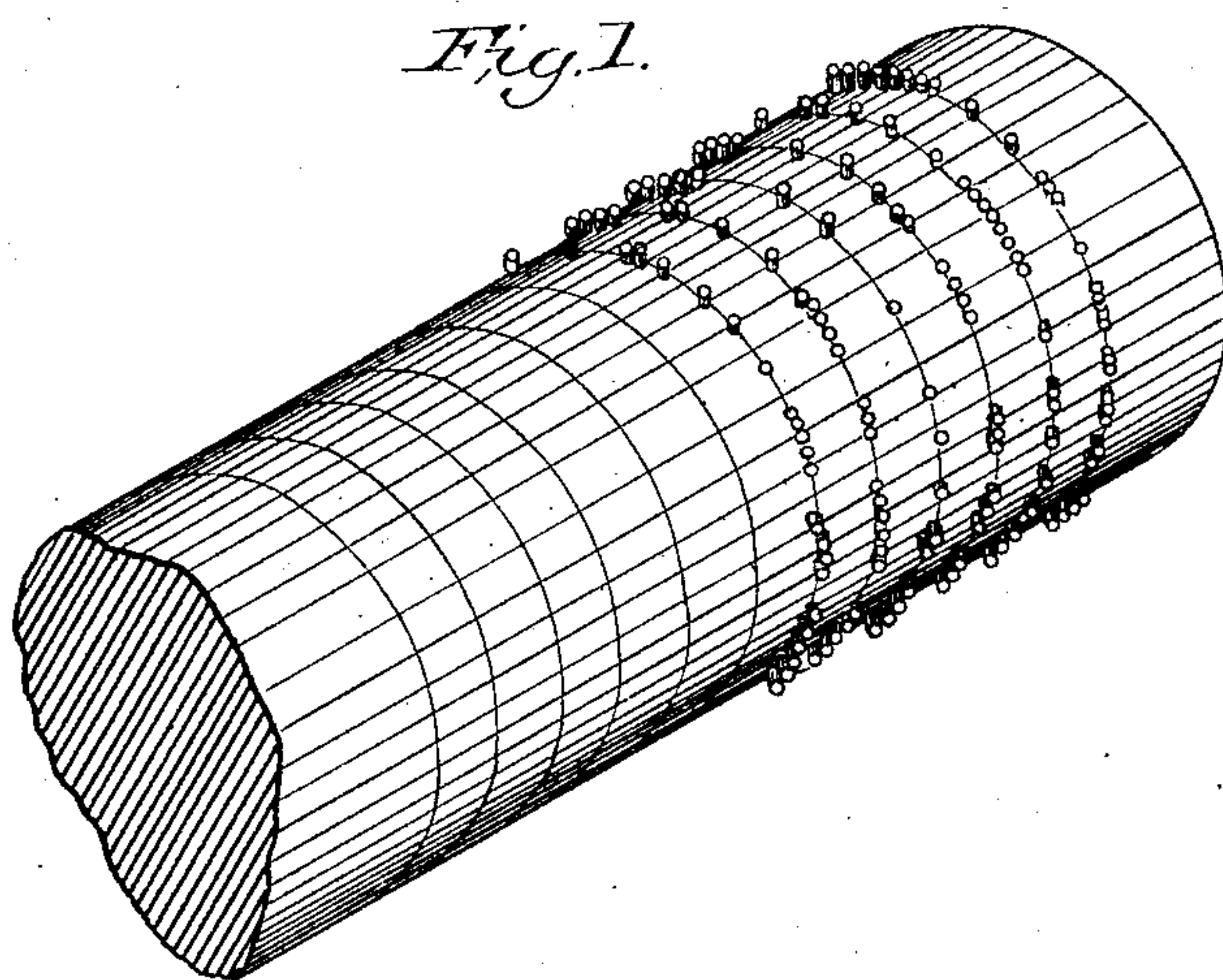
(No Model.)

H. B. MORRIS.

BARREL FOR MECHANICAL MUSICAL INSTRUMENTS.

No. 322,390.

Patented July 14, 1885.



Witnesses:

E. J. Walker

W. M. Hannay

Inventor.

Henry B. Morris
by his attorney
J. E. Eide

UNITED STATES PATENT OFFICE.

HENRY B. MORRIS, OF ITHACA, NEW YORK, ASSIGNOR TO THE AUTOPHONE COMPANY, OF SAME PLACE.

BARREL FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 322,390, dated July 14, 1885.

Application filed May 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY B. MORRIS, a citizen of the United States, residing at Ithaca, in the county of Tompkins and State of New York, have invented certain new and useful Improvements in Barrels for Mechanical Musical Instruments; 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.

This invention consists of a barrel or music-roller for mechanical musical instruments, on which the music it is designed to play is represented wholly by pins, each prolonged note being obtained by a succession of pins in close contiguity, forming in effect a continuous ridge.

In order that my invention may be clearly understood, I have illustrated in the annexed drawings, and will proceed to describe, a section of a music-roller on which the pins are arranged along the convolutions of a spiral line, the roller being intended for a mechanical musical instrument which operates with a spiral feed.

Figure 1 is a perspective view of a portion of a music-roller constructed in accordance with my invention. Fig. 2 is an end view of the same.

The music-rollers of mechanical musical instruments are usually provided with pins for playing the short notes and with staples of varying lengths for playing prolonged notes. The use of staples, which of necessity require to be of varying lengths, is a practically insuperable obstacle to the manufacture of music-rollers by machinery, for it would be extremely difficult to construct a machine capable of selecting the proper staple at the

proper time and of inserting the varying staples if they could be selected. This difficulty is wholly overcome by providing music-rollers with a succession of closely contiguous or adjoining pins wherever a prolonged note occurs, as shown at various points along the section of roller illustrated in the drawings, the closely-set pins being just like the pins for playing the shortest notes. Thus, if a single pin represents a one-eighth note, a one-fourth note would be represented by two, a one-half note by four, and a whole note by eight adjoining pins.

Music-rollers of this description may be prepared automatically by suitable machinery—such, for instance, as is described in an application for United States Letters Patent filed by me of even date with the application for this patent, and bearing serial number 130,007.

I claim as my invention—

1. A music-roller or barrel on which the short notes are represented by separated single pins and the longer notes by a succession of like but closely adjoining pins, substantially as before set forth.

2. A music-roller or barrel on which the pins for playing a piece of music are arranged along the convolutions of a spiral line, the shortest notes being represented by separated single pins and the longer notes by a succession of like but closely adjoining pins, substantially as before set forth.

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

HENRY B. MORRIS.

Witnesses:

FRANK M. LEARY,
EDWIN H. WOODRUFF.