

H. P. BROWN.
MUSICAL TOY.

(Application filed May 22, 1900.)

(No Model.)

Fig. 1.

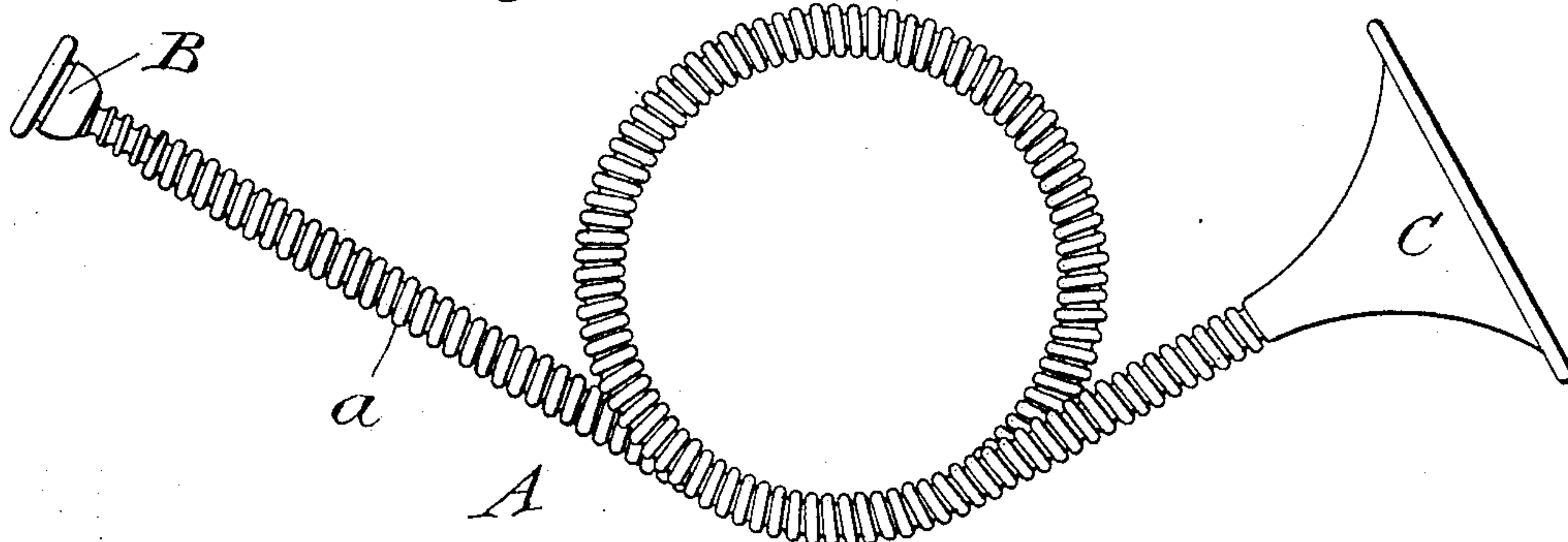


Fig. 2.

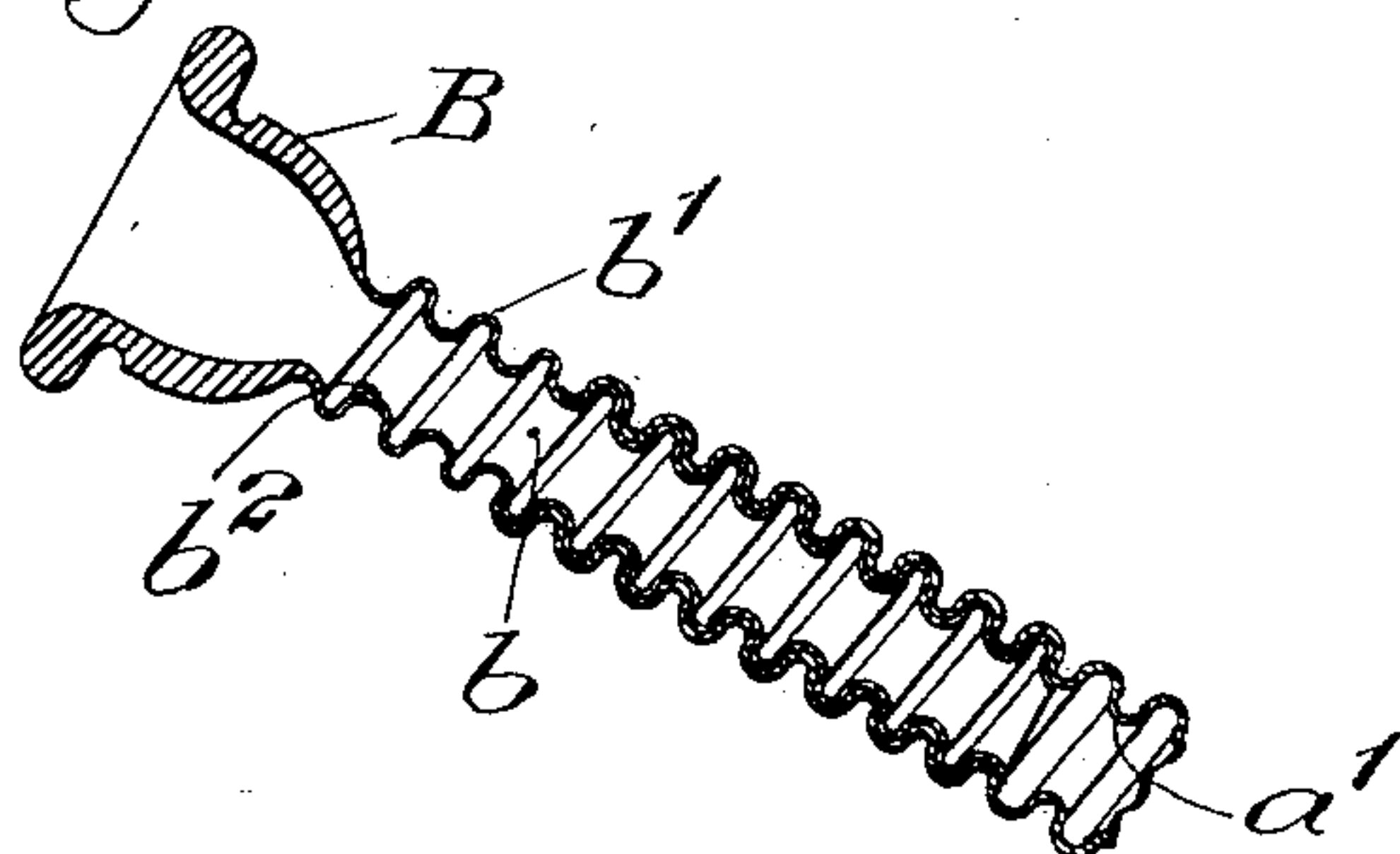


Fig. 3.

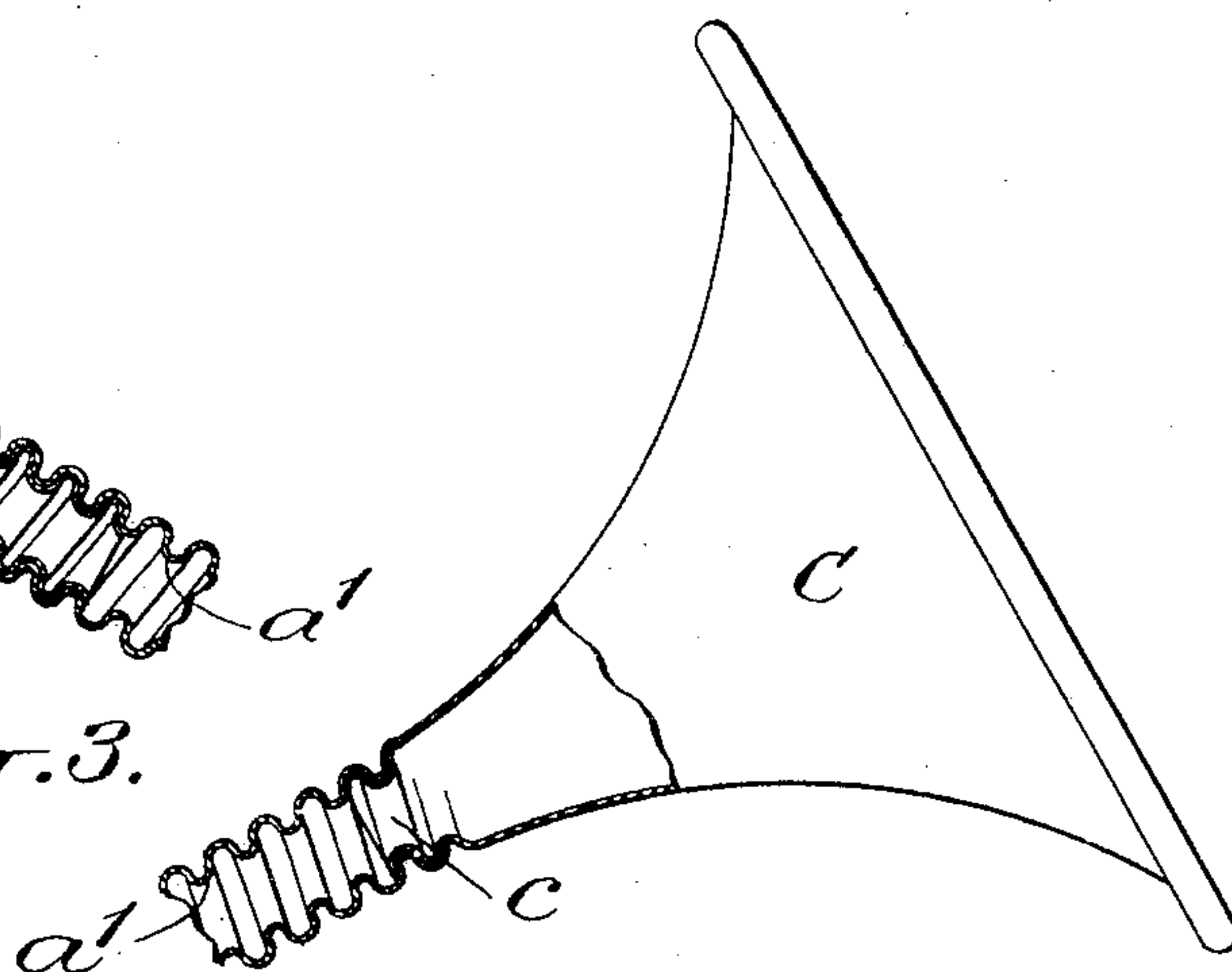
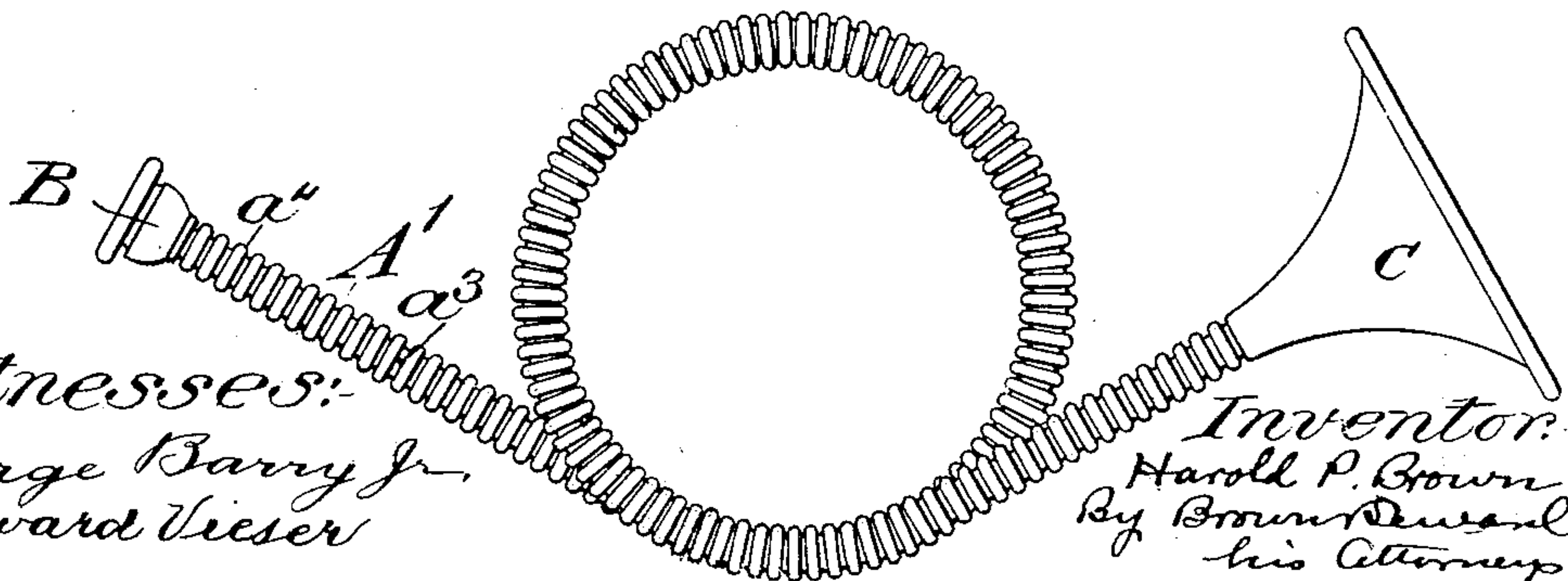


Fig. 4.



Witnesses:

George Barry Jr.
Edward Lieser

Inventor:

Harold P. Brown
By Brown & Deane
his Attorney

UNITED STATES PATENT OFFICE.

HAROLD P. BROWN, OF MONTCLAIR, NEW JERSEY.

MUSICAL TOY.

SPECIFICATION forming part of Letters Patent No. 704,233, dated July 8, 1902.

Application filed May 22, 1900. Serial No. 17,521. (No model.)

To all whom it may concern:

Be it known that I, HAROLD P. BROWN, a citizen of the United States, and a resident of Montclair, in the county of Essex and State of New Jersey, have invented a new and useful Musical Toy, of which the following is a specification.

My invention relates to a musical toy, the particular form which the toy assumes in the present embodiment of my invention being that of a trumpet. I have discovered that where the pipe through which wind is forced is provided with a plurality of riffles extending in a general transverse direction with respect to the longitudinal axis of the tube and located on the inner wall of the tube the result will be a series of sounds and that these sounds may be varied at will by increasing or decreasing the force of the current of air.

My invention, therefore, broadly consists in a wind instrument the body of which is formed of a tube provided with a series of riffles on its interior wall, the said riffles extending transverse to the longitudinal axis of the tube.

In the accompanying drawings, Figure 1 represents a view of the trumpet in side elevation, the riffles in this particular form being arranged spirally and the entire wall being crimped to form them. Fig. 2 is an enlarged sectional view of the end provided with the mouthpiece. Fig. 3 is an enlarged view, partly in section, of the end provided with the bell; and Fig. 4 is a view in side elevation of a trumpet, showing the riffles extending at right angles to the longitudinal axis, forming a series of independent annular riffles.

In the form of wind instrument here shown the body of the trumpet is given a single turn intermediate of its ends; but it is to be understood that the body of the instrument may assume a variety of forms or may be perfectly straight, as may be desired.

The body of the instrument, Figs. 1, 2, 3, is denoted by A. The wall of the body portion is crimped to form a spiral rib, thereby presenting a series of riffles on the exterior, as well as on the interior, of the tube. The exterior riffles formed by the spiral rib are denoted by a and the interior (see Figs. 2 and 3) by a' . The mouthpiece (denoted by B) is

conveniently provided with a stem b , having its wall crimped to form exterior and interior ribs b' b^2 to register with the spiral grooves intermediate of the interior riffles a' of the body of the instrument, thereby permitting the mouthpiece B to be screwed into and out of the end of the body portion A to decrease and increase the length of pipe and thereby the pitch at pleasure. The bell (denoted by C) is conveniently provided with a short stem c , also crimped to correspond with the riffles or spiral rib of the body portion, and may be secured permanently in position by means of solder or other suitable fastening means.

In the form shown in Fig. 4 the body A' of the instrument is crimped to form a series of annular ribs or riffles a^2 on the exterior, and a^3 on the interior. Its mouthpiece B' may be permanently attached to the end of the body portion by means of a short stem, or it may be provided with a plain tubular stem to slide in and out in any well-known or approved form. The bell C' of this form may be attached by means of a short stem soldered to the end of the body.

The notes which may be sounded from this instrument are soft and sweet, and it requires but little effort to force the air through the instrument with power enough to produce them.

What I claim is—

1. A wind instrument comprising a cylindrical tube having a series of riffles on its interior wall, the said riffles being transverse to the longitudinal axis of the tube and means for applying the mouth to the tube to force air through it, substantially as set forth.

2. A wind instrument comprising a cylindrical tube provided with a series of riffles projecting from and extending around the interior wall of the tube transverse to the longitudinal axis of the tube and means for applying the mouth to the end of the tube, substantially as set forth.

3. A wind instrument comprising a cylindrical tube provided with riffles extending spirally around the interior of the tube and means for applying the mouth to the end of the tube to force the wind through the tube, substantially as set forth.

4. A wind instrument comprising a cylin-

drical tube having its wall crimped to form
rifflles projecting from the interior of the tube
transverse to the longitudinal axis of the tube,
a mouthpiece attached to one end of the tube
5 and a bell attached to the opposite end of the
tube, substantially as set forth.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of two witnesses, this 9th day of May,
1900.

HAROLD P. BROWN.

Witnesses:

FREDK. HAYNES,
C. S. SUNDGREN.