

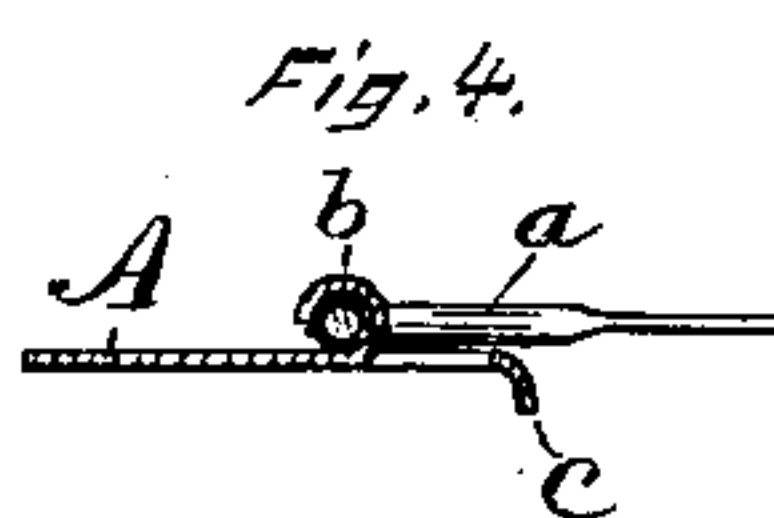
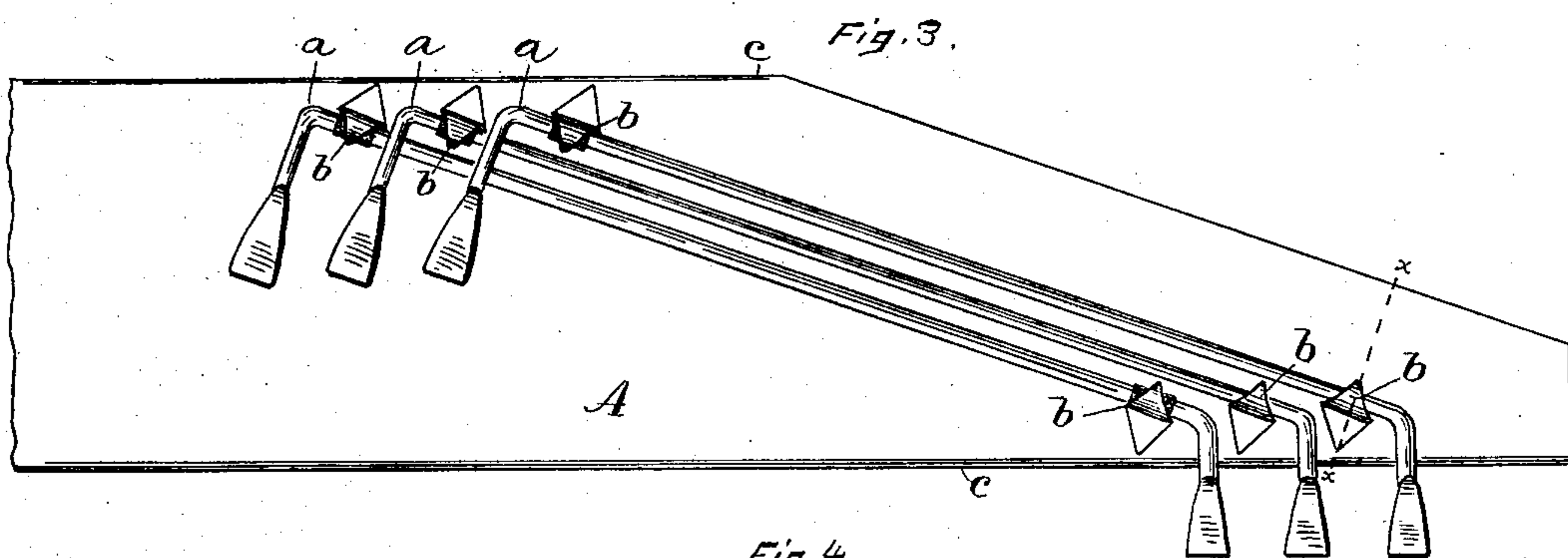
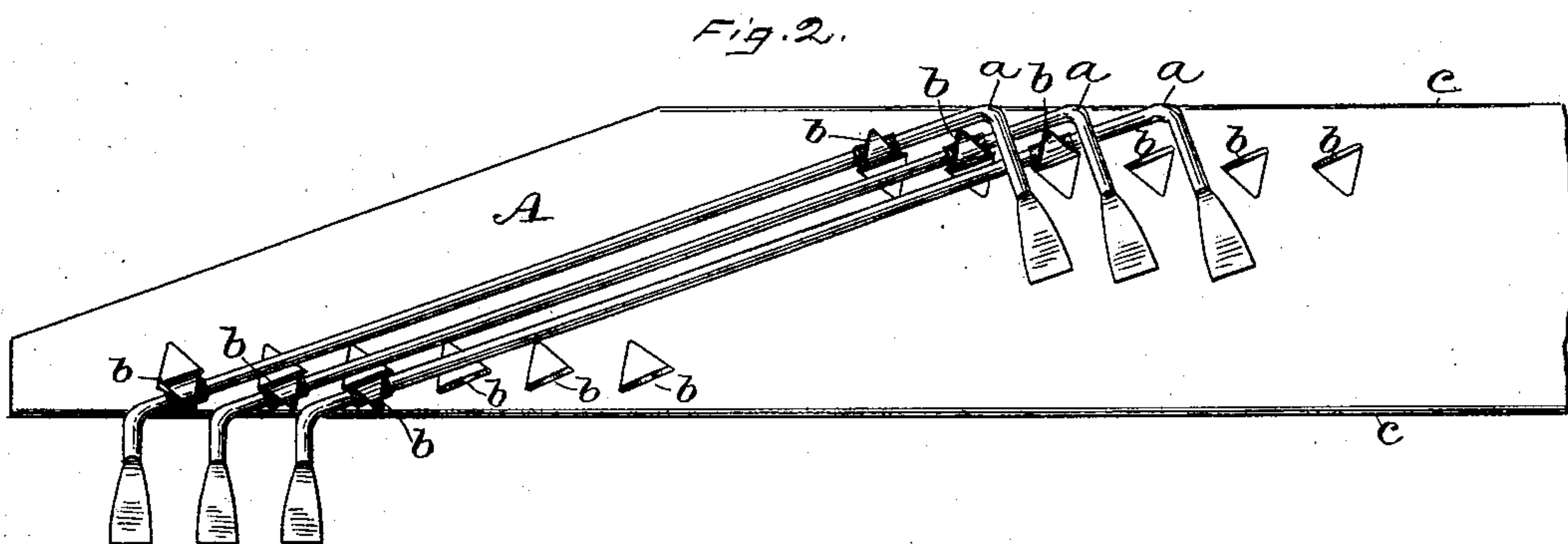
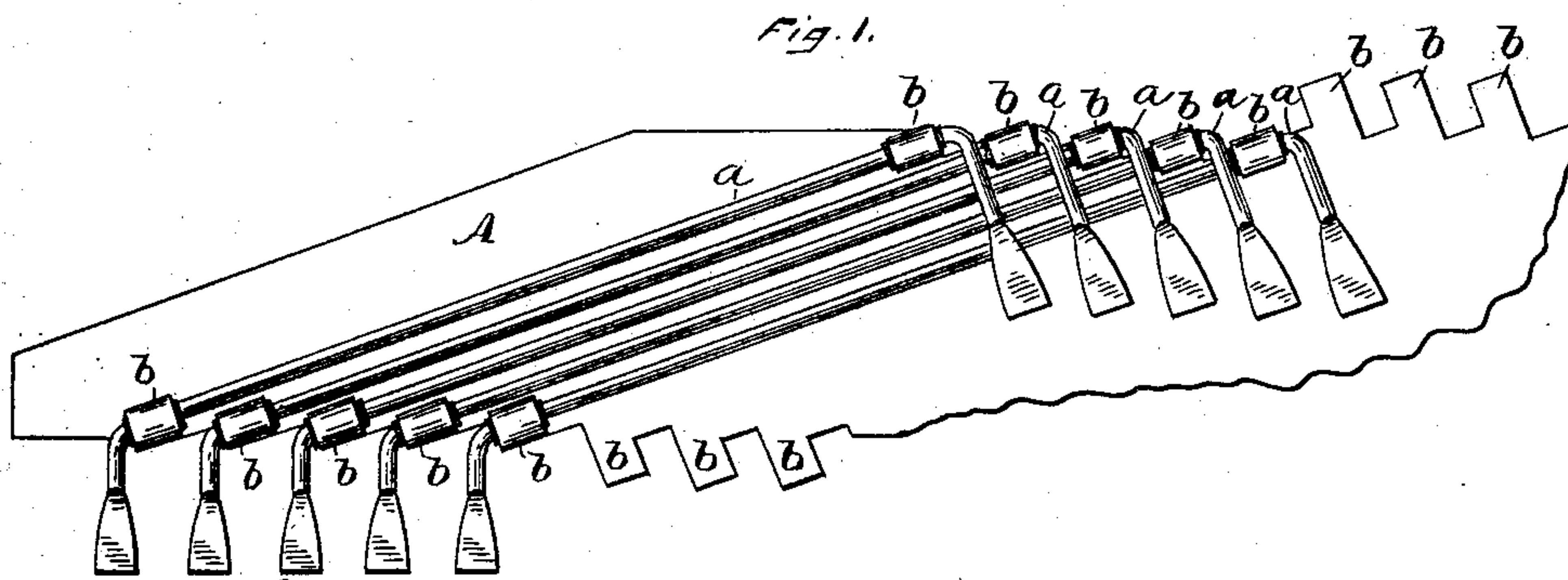
(No Model.)

2 Sheets—Sheet 1.

J. S. BRAND.
OCTAVE COUPLER.

No. 373,122.

Patented Nov. 15, 1887.



Witnesses.

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W. H. Whiting

Inventor.

John S. Brand.
By James Shepard
att'y.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

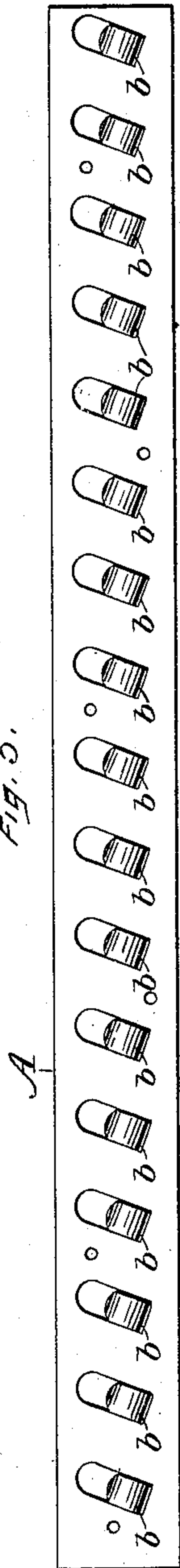
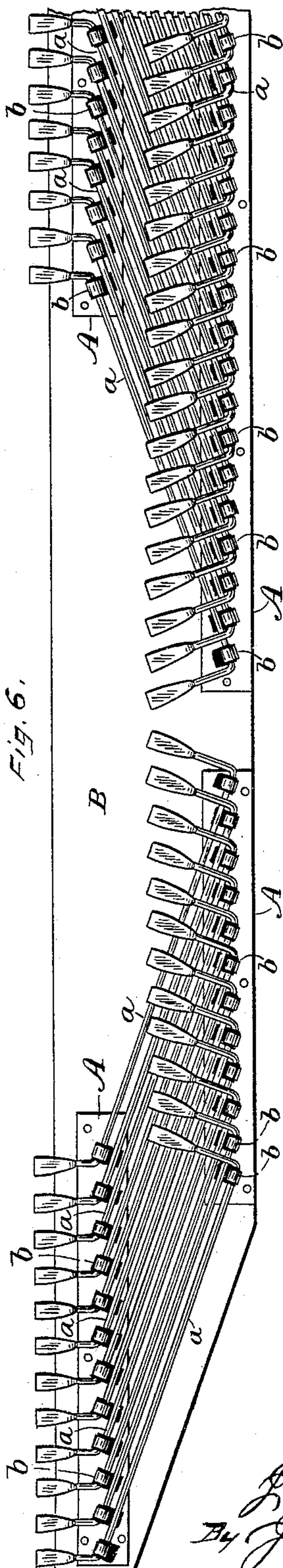


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN S. BRAND, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
BRAND MANUFACTURING COMPANY, OF SAME PLACE.

OCTAVE-COUPLER.

SPECIFICATION forming part of Letters Patent No. 373,122, dated November 15, 1887.

Application filed December 28, 1886. Serial No. 222,758. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. BRAND, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Octave-Couplers, of which the following is a specification.

My invention relates to improvements in octave-couplers of the class having a series of coupler-arms hinged or pivoted to a base or support; and the object of my invention is to produce a better coupler and at less cost than heretofore.

In the accompanying drawings, Figure 1 is a plan view of a portion of a coupler-base and several coupler-arms secured thereto. Figs. 2 and 3 are like views of the same somewhat modified in construction. Fig. 4 is a transverse section of Fig. 1. Fig. 5 is a detached plan view of a narrow base and coupler-lugs in one form of my invention, and Fig. 6 is a like view on a smaller scale of the same in connection with coupler-arms.

Heretofore couplers have been made consisting of a wooden base or board having a series of coupler-arms like those shown in the drawings and arranged in the same position on the board, said arms being pivoted or hinged within little blocks which were secured by screws to said board or base, the same forming quite an expensive structure, and from the nature of the material employed, as well as the manner of construction, it was not only expensive to make, but frail and unsatisfactory when made.

One prior patent shows an improvement thereon, consisting of two plates or strips of metal with notched edges, leaving intervening tongues to bend over and around the coupler-arms, which strips were secured to a wooden base.

I form the coupler-base A in the preferred form wholly of sheet metal, and secure the coupler-arms *a* thereto by means of lugs *b*, formed integral with the base A and simply bent into a coil around the body of the coupler-arms, as shown. In order to prevent the coupling-arms from rattling, pieces of felt may be placed between the inner surface of the lugs

and the body of the coupler-arm inclosed by said lugs.

In Fig. 1 I have illustrated the lugs *b* as formed at the edge of the metal and originally projecting therefrom, as shown by the unbent lugs to which no coupler-arms have been attached, while the lugs which are represented in connection with the coupler-arms are represented as coiled around said arms. In Figs. 2 and 3 I have represented the base A as provided with straight edges *c*, the edge being preferably bent or turned at an angle to the body of the base, as shown in the sectional view, Fig. 4, which shows one of said edges. The lugs *b* in these straight-edged bases are cut from the body of the metal with any suitable die which cuts upon all of its sides but one, the piece of metal thus cut out being turned up at the side which is left uncut by said die, so as to leave a perforation in the base. I have illustrated these lugs as of a triangular form and as made by a die which cuts upon two sides only, and preferably one which at the same time bends up the lugs upon the uncut side, leaving a triangular perforation. Part of the lugs are thus represented as cut out and turned up, while those shown in immediate connection with the arms *a* are represented as bent around said arms, so that the arms are hinged or pivoted to the base within said lugs.

In Fig. 2 the lugs are so cut as to be bent from the inside toward the edges, while in Fig. 3 they are so cut as to be bent from the edges inward.

In Figs. 5 and 6 the same construction is shown as in Figs. 2 and 3, except that the perforations from which the lugs *b* are cut are of a slightly-different form; and instead of making the base A of full width and with two series of lugs on a single piece of metal, I make a narrow base for the lugs at each end of the coupler-arms and secure said bases to a board, B. Fig. 6 also shows a greater number of the coupler-arms.

The base with the coupler-arms secured thereto may be connected with the keys of the organ in the same manner as the coupling-arms on the old wooden base have heretofore

been connected therewith, and for this reason I consider it unnecessary to illustrate the connection of the coupler-arms with the keys.

I claim as my invention—

- 5 1. In an octave-coupler, the base A, formed of a continuous strip of metal and provided with the two series of lugs within which to hinge or pivot the coupler-arms, both of which series are formed at the opposite edges of a
10 single piece of metal, substantially as described, and for the purpose specified.

2. In an octave-coupler, a metal base having a straight edge and a series of lugs for hinging the coupler-arms bent out from the body of the base at points inside of said edge, 15 substantially as described, and for the purpose specified.

JOHN S. BRAND.

Witnesses:

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JAMES SHEPARD.