

T. C. BANKS.
Signal Whistle.

No. 42,137.

Patented March 29, 1864.

Fig. 1.

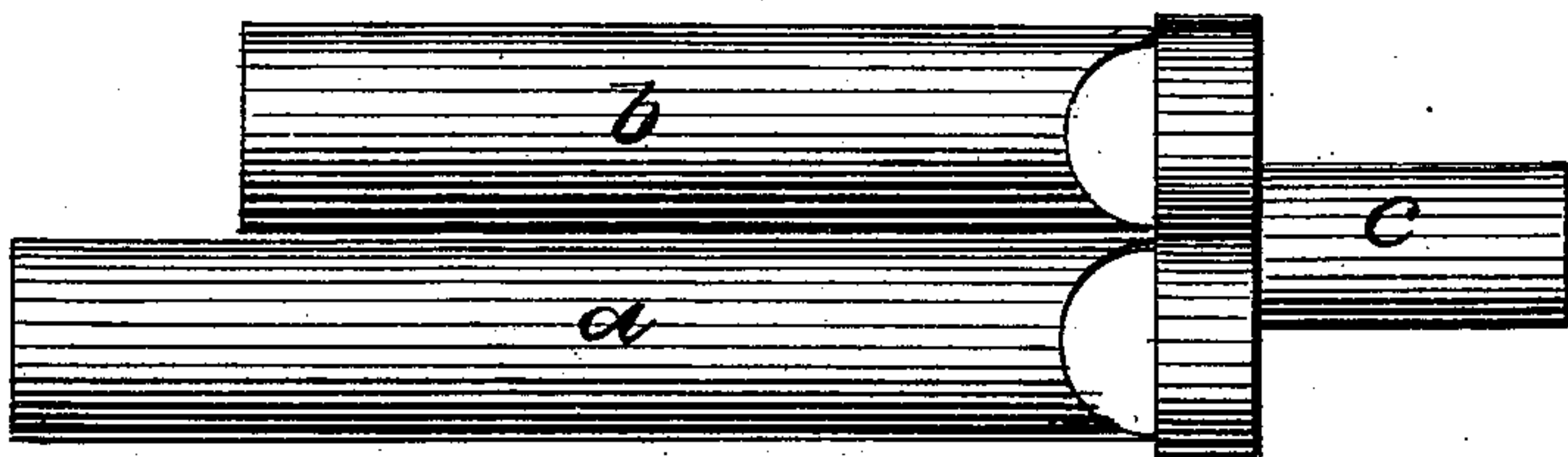
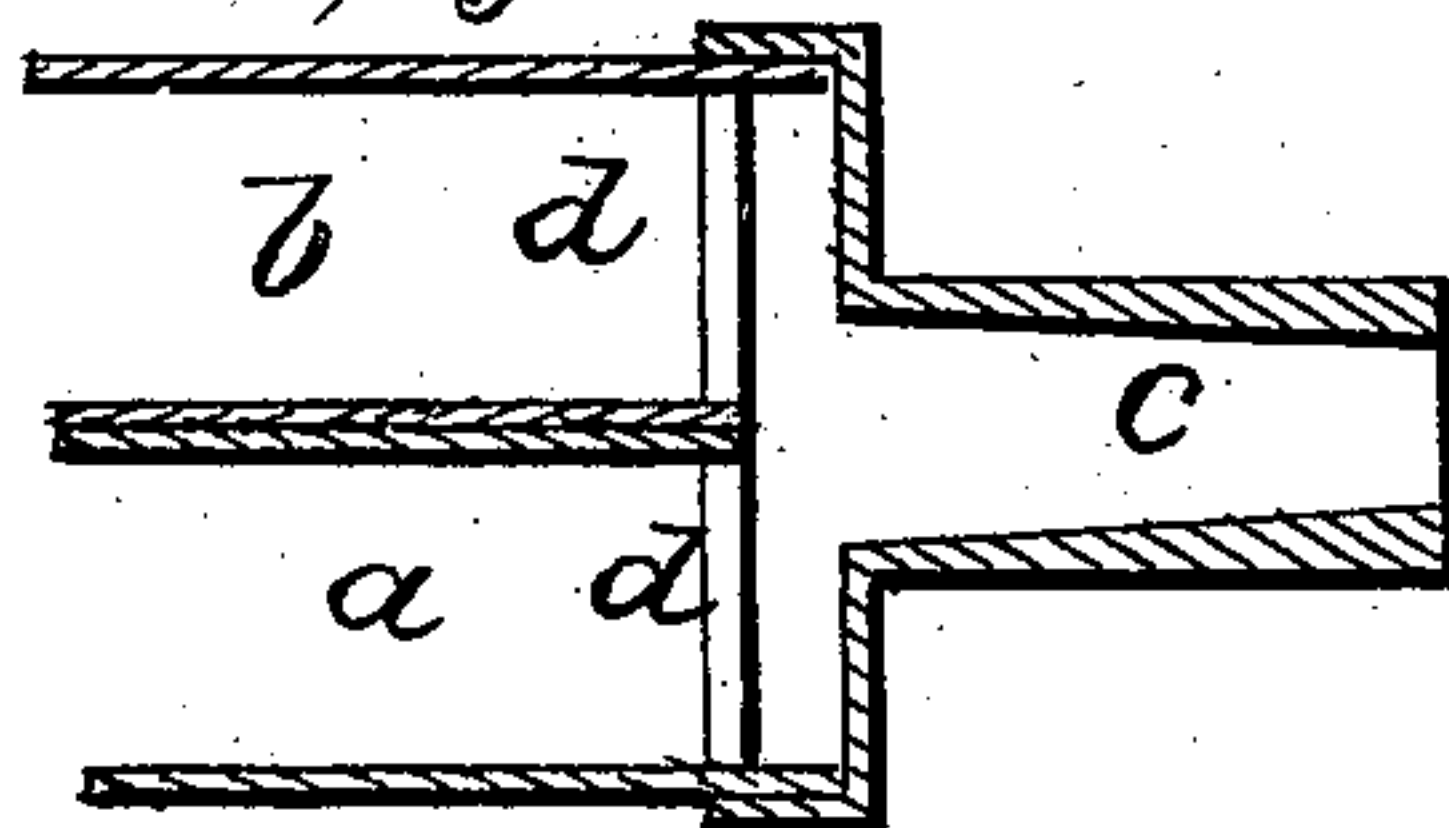


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

THADDEUS C. BANKS, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
SAMUEL A. BANKS, OF SAME PLACE.

IMPROVEMENT IN SIGNAL-WHISTLES.

Specification forming part of Letters Patent No. 42,137, dated March 29, 1864.

To all whom it may concern:

Be it known that I, THADDEUS C. BANKS, of the city, county, and State of New York, have invented certain new and useful Improvements in Signal-Whistles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawing, making a part of this specification, and fully described herein.

My invention lies in so constructing a signal-whistle that the sound which may be produced by it shall be of such peculiar character that it will be readily recognized and distinguished from any other whistle by the signal officer whose ear the sound was intended to reach. If the tone be a perfect musical note, it can readily be imitated, and I resort, therefore, to a compound of tones which are not in accord, and which consequently produce a discordant sound. This is to be effected by a single effort of the lips at each sound of the whistle, as in the ordinary manner of using a signal-whistle, and the discordant sound can be recognized by an ordinarily musical ear with extreme accuracy, while it is almost impossible to imitate it. Thus it becomes also valuable for fog-whistles, steam-whistles, &c., in which the identity or location of particular signals is important.

To produce the desired sound, I construct the whistle of two barrels or pipes lying side by side, and both receiving the wind from a

common head and mouth-piece. One of these pipes is to be shorter than the other, and may also be smaller in diameter, and thus, if the voice of the longer pipe be a true musical tone, a discord may be added to it by the shorter pipe, running to any part of the octave, or, if the pipe be also smaller, to an octave above.

In the annexed drawing, *a* represents the longer barrel of the compound whistle, and *b* the shorter one. These receive wind from the common mouth piece *c* through the notches or slit in the diaphragm-plate *d*, in the usual manner. If the pipe *a* were made to speak a true musical tone, the pipe *b* should be so shortened that it would speak that tone or a higher tone, but flattened, and thus the compound would necessarily be a discordant sound. A signal station may thus have a number of sets of these compound whistles, each set speaking alike, but the whistles of each set sounding a different discord of the key-note, and thus the range of signals may be indefinitely increased.

I claim—

Constructing a signal-whistle of more than one pipe or barrel, but each combined with a common mouth-piece, in the manner and for the purpose substantially as set forth.

THADDEUS C. BANKS.

Witnesses:

J. P. PIRSSON,
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