J. Torday,

Drum Fine,

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Fatented Mar. 13, 1860.

Zig;I.Fig; 2. Witnesses; 20.Combs.

R.S. Sherren

## UNITED STATES PATENT OFFICE.

JACKSON GORHAM, OF BAIRDSTOWN, GEORGIA.

## ORGAN-PIPE.

Specification of Letters Patent No. 27,443, dated March 13, 1860.

To all whom it may concern:

Be it known that I, Jackson Gorham, of Bairdstown, in the county of Oglethorpe and State of Georgia, have invented a new and 5 useful Improvement in Organ-Pipes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specifica-10 tion, in which—

Figure 1 represents a transverse vertical section of an organ mouth-pipe or flute, clearly showing my improvement. Fig. 2 is a side view of figure 1, showing one of the apertures, or mouths.

Similar letters of reference indicate cor-

responding parts in both figures.

The object of this invention is to increase the quantity and quality of sound in organ 20 pipes, and in that species technically known as the flute pipes by doubling the speaking qualities of each pipe, as will be hereinafter described and represented.

The wooden mouth pipes, of my improved 25 construction, consist each of a four-sided trunk or chest, formed by gluing four plain boards together; the cross section is not square, but oblong, one side being to the other in the proportion of five to four. The lower end of the tube is partly closed by means of a block a, on which two of the walls of the pipe are glued between the remaining sides and the block a, apertures or

mouths b, b, are formed across the front and back. These openings are formed by 35 cutting off in a sloping direction, or by beveling the upper portion of the walls a little above the upper part of the block a, so as to form sharp edges, c, with the back or inside surface of the two walls; these sharp edges 40 c, c, are called the wind-cutters. The two portions of the front and back walls, below the mouths b, b, form, with the beveled sides of the block a the plates of wind, which, when the foot d—a hollow tube com- 45 municating with both mouths b, b,—is supplied with air, is forced in thin streams against the upper edges or wind cutters c c; and the vibrations which they thus receive, they impart to the whole column of air in 50 the pipe, the result of which is a full toned musical note, nearly if not quite doubled in volume, depending of course for its pitch upon the length of the column thus set in motion.

Having thus described my invention, what I claim and desire to secure by Letters Pat-

ent, is,

Constructing organ pipes, with two musical throats and mouths, both communicat- 60 ing with the foot d, for the purposes, and substantially as set forth.

JACKSON GORHAM.

Witnesses:

O. A. McLaughlin,

T. R. Swanson.