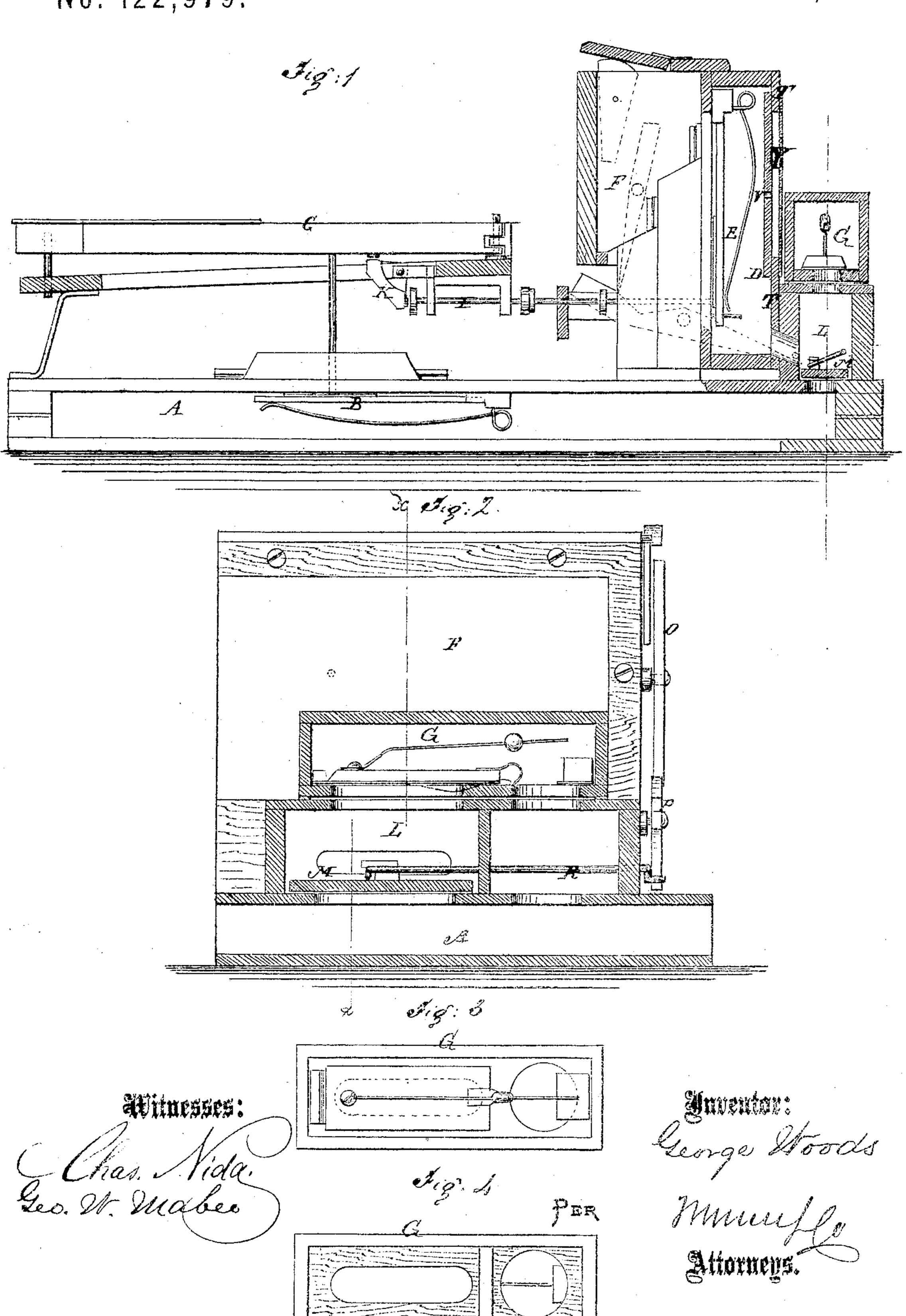
## GEORGE WOODS.

## Improvement in Reed Organs.

No. 122,979.

Patented Jan. 23, 1872.



## UNITED STATES PATENT OFFICE.

GEORGE WOODS, OF CAMBRIDGEPORT, MASSACHUSETTS.

## IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. 122,979, dated January 23, 1872.

Specification describing certain Improvements in Reed-Organs, invented by George Woods, of Cambridgeport, in the county of Middlesex and State of Massachusetts.

My invention consists of an arrangement of an additional wind-chest reed and sounding-box, such as is described in my patent of September 13,1870, relatively to the common wind-chest whereby the apparatus for working the valves of the said attachment is simplified and improved. The invention also consists of a combination of a sheet or web of India-rubber coated cloth or other equivalent substance, with the sounding-board of the aforesaid additional wind-chest for varying and improving the tones.

Figure 1 is a transverse section through the key-board, the ordinary wind-chest, and the additional one of an instrument having my improvements applied to it, the section being taken on the line x x of Fig. 2. Fig. 2 is a section on the line y y of Fig. 1. Figs. 3 and 4 are details of the tremolo attachment.

A represents the wind-chest. B the valves, and C the keys of the ordinary arrangement. D is the additional wind-chest. E the valves. F the sounding-box. G the sounding-box of the tremolo attachment, and I and K the means of opening the valves by the keys. Lis a valve-box through which the wind is allowed to pass from chest D to A when required, by lifting the valve M, which is actuated by the levers O P and the cranked rod R, the lever O being connected with any suitable apparatus by which the operator can actuate it when at the key-board. Now, by arranging the wind-chest

D and its sound-chest F vertically, as here shown, so that the valves E may be vertical, I am enabled to open said valves by rods I and sector pieces K, arranged relatively to the keys, as shown, being a more simple, cheap, and efficient arrangement than any heretofore used, requiring only two pieces additional to the common action. I now propose to employ a web or sheet of India-rubber coated or other equivalent webbing of flexible material which is applied to the rear wall T of the wind-chest D, as shown—that is to say, an opening of suitable size is formed in said wall, and a plate of wood or metal applied to cover or close the same on the inside, but provided with with a central aperture, V. The rubber sheet is similarly applied on the outside of the wall so that a chamber, Y, is formed between it and the aforesaid plate into which the air enters through the aperture V. This arrangement has the effect of rendering the sounds peculiar or of a quality not obtainable in other instruments.

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

ent—

1. The vertically-arranged valves E, keys C, horizontal rods I, sector pieces K, wind-chest D, and sound-box F, combined substantially as specified.

2. The flexible webbing and apertured plate applied to the wind-chest D, substantially as

specified.

GEORGE WOODS.

Witnesses:

A. M. Woods, John McDuffie.