

No. 653,135.

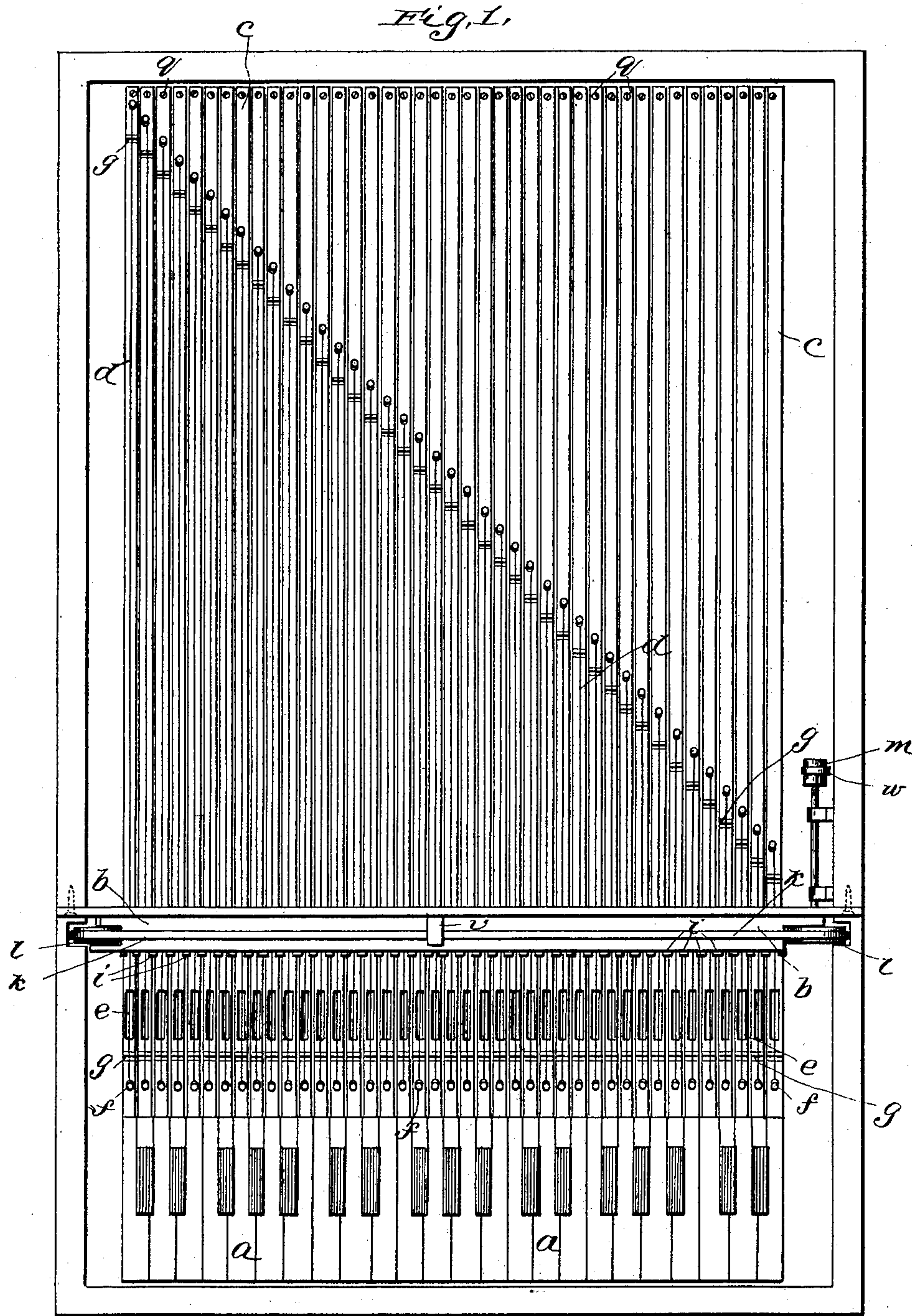
Patented July 3, 1900.

R. J. CLARK.  
MUSICAL INSTRUMENT.

(Application filed Apr. 20, 1899.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses:

J. E. Clark  
C. H. Payne

Inventor:

Rufus J. Clark,

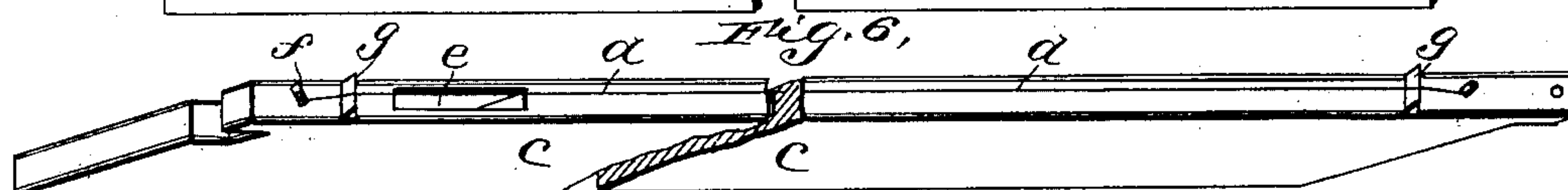
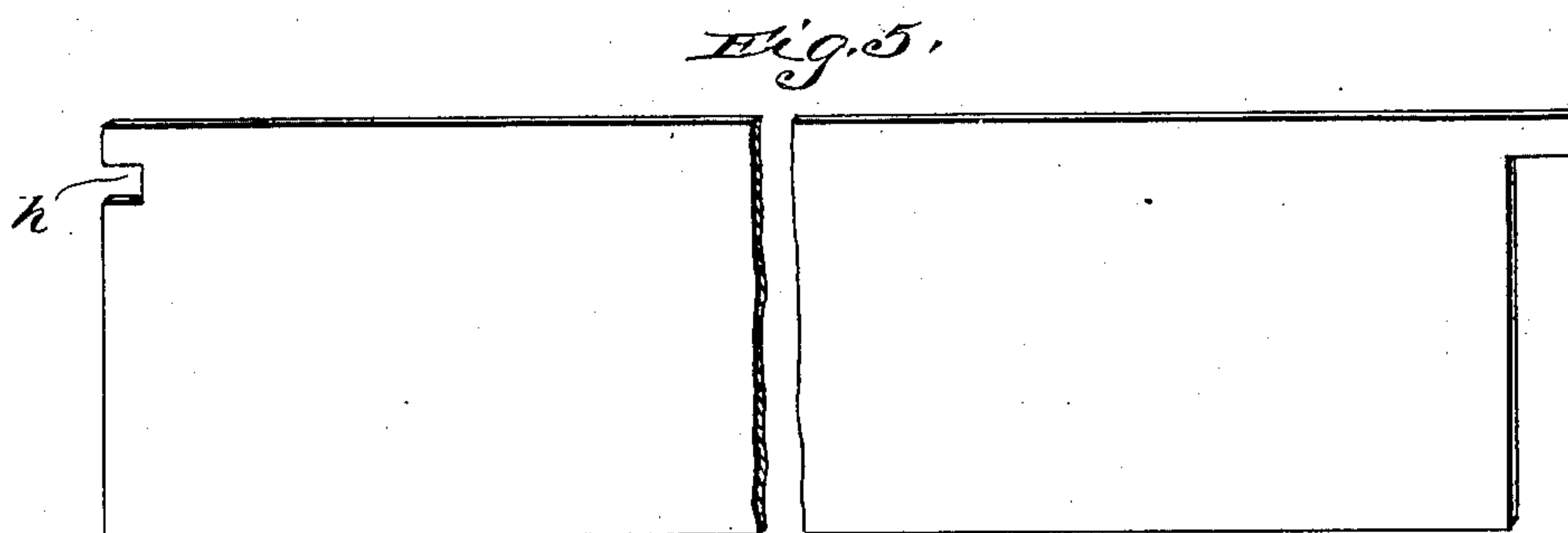
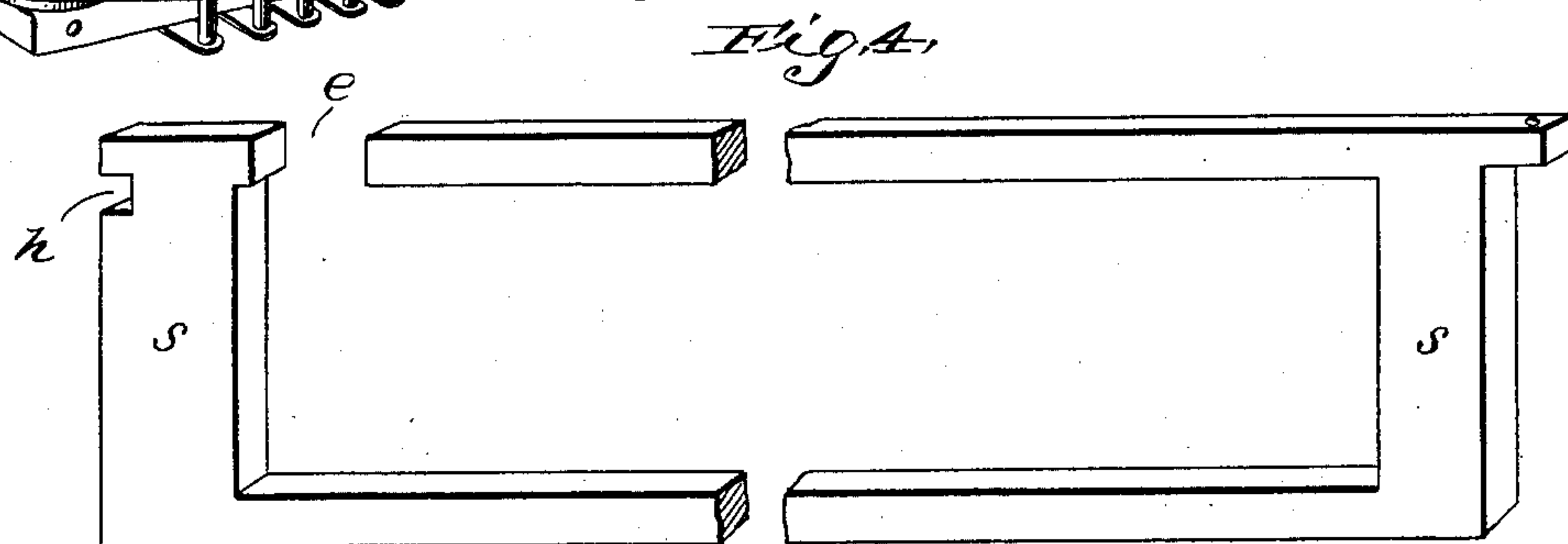
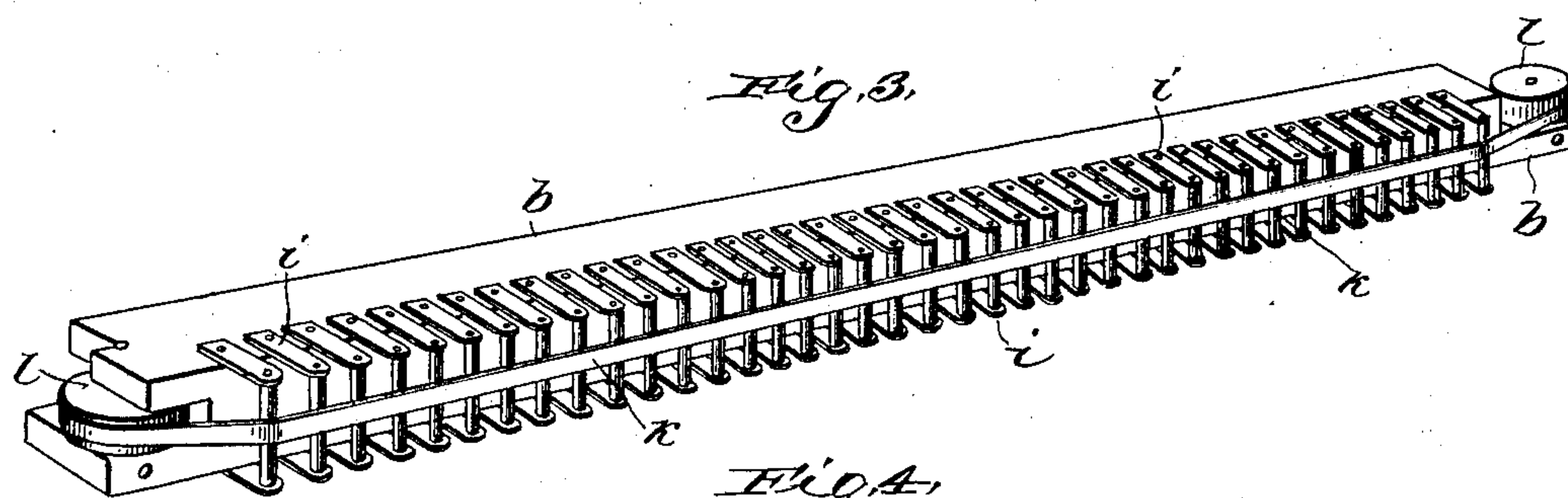
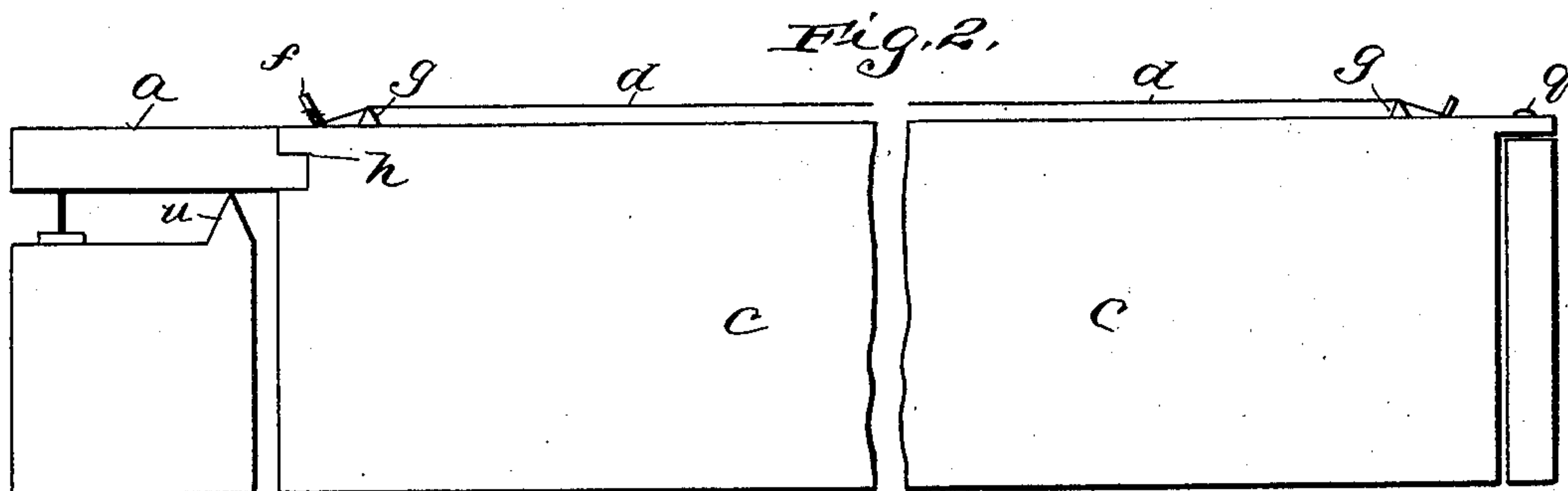
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3 Sheets—Sheet 2.



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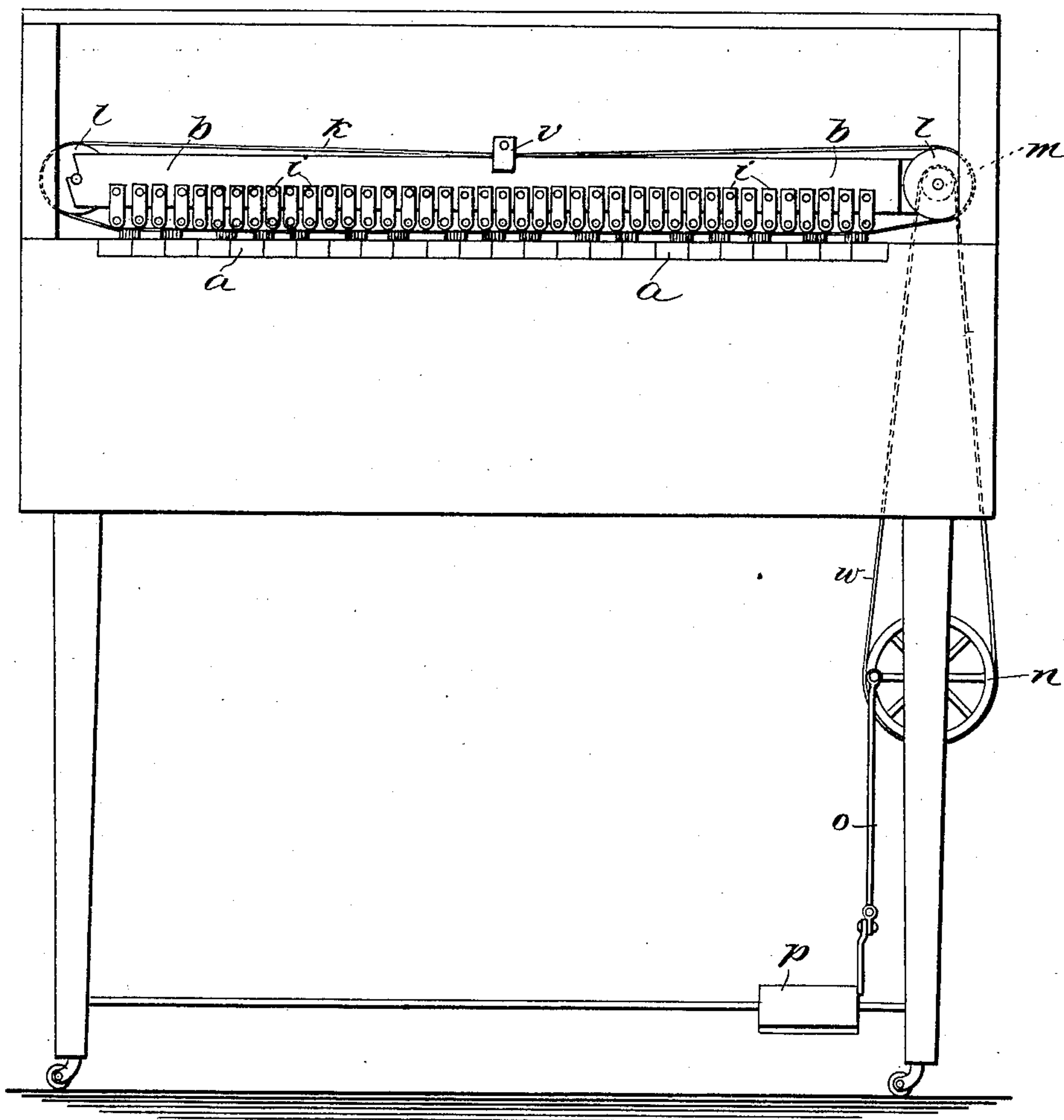
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(No Model.)

3 Sheets—Sheet 3.

*Fig. 7.*



*Witnesses:*

*J. C. Clark*  
*W. W. Payson*

*Inventor:*

*Rufus J. Clark.*



# UNITED STATES PATENT OFFICE.

RUFUS JESSE CLARK, OF FRANKLIN, TENNESSEE.

## MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 653,135, dated July 3, 1900.

Application filed April 20, 1899. Serial No. 713,817. (No model.)

*To all whom it may concern:*

Be it known that I, RUFUS JESSE CLARK, a citizen of the United States, residing at Franklin, in the county of Williamson and State of Tennessee, have invented a new and useful Musical Instrument, of which the following is a specification.

My invention is a new kind of musical instrument having keys like a piano or organ or type-writer and a rotating bow and strings stretched lengthwise upon boxes, which boxes and strings are moved by the keys and brought in contact with the resined bow, producing violin-music, so that one performer can carry all parts of a stringed orchestra simultaneously.

The objects of my invention are, first, to produce violin-music by means of a rotating bow; second, to construct sounding-boxes with strings stretched upon them, each box representing a violin with one string, and, third, to use the keyboard to bring the sounding-boxes sufficiently near the rotating bow to cause the taut strings to touch the resined bow, which causes the strings to vibrate so long as held in that position. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a plan view of the instrument; Fig. 2, a sounding-box with string upon it and one key and lever; Fig. 3, the rotating bow and its fixtures; Fig. 4, the inside framework of a sounding-box; Fig. 5, one side of the sounding-box; Fig. 6, the sounding-box complete; Fig. 7, a front view showing the framework, propelling machinery, keyboard, and bow-frame.

Similar letters refer to similar parts throughout the several views.

Fig. 1 is a plan view showing the keyboard *a a*, the framework *b b* of the bow, the sounding-boxes *c c*, strings *d d*, holes *e e* in sounding-boxes, tuning-pins *f f*, bridges for strings *g g*, mortise and tenon *h* between key and box, pieces or boxings *i i* for rollers under bow-frame, the rotating bow *k k*, wheels *l l*, on which the bow runs, little band-wheel *m*, that runs the bow, frame *v v* for resin, and screws *q q*, which fasten the sounding-boxes to the frame.

Fig. 2 shows the sounding-box *c*, string *d*, tuning-pin *f*, bridges *g g* for strings, mortise and tenon *h*, connecting key and box, key *a*, fulcrum *u* for key, and screw *q*, fastening box and frame.

Fig. 3 shows frame *b b* for bow, wheels *l l*, on which the bow runs, the rotating bow *k k*, rollers *j j*, which are placed between the bow-frame and the bow itself, the rollers having journals at each end working in boxes *i i*, affixed to the roller-frame. The rollers are used to prevent friction and cause the rotating bow to glide by smoothly; also, as the string is pressed against the bow between two wheels the wheels cause the material of which the bow is made to give somewhat, so that a veritable violin-bow is formed between the two wheels, as they may be used from one end of the rotating bow to the other. The bow itself is made soft by having the velvet side of velvet ribbon turned inside, so that the silk side is out, and either resined or has hair woven upon it and the hair resined.

Fig. 4 shows the inside frame of the sounding-boxes. The ends *s s* correspond in grain with that of the covering-pieces, so that the boxes as a whole expand and shrink all over alike. *r* represents the cavity of box.

Fig. 5 illustrates one side of the sounding-box.

Fig. 6 illustrates a sounding-box *c* when completed, with string *d d*, tuning-pin *f*, bridges *g g*, mortise, *h*, end, and screw *q* for fastening box to frame. These sounding-boxes complete are from the thickness of one-half inch to any size which the capacity of the instrument may require.

Fig. 7 shows a front view, in which *p* is the pedal, and *o* the connecting-rod from pedal to balance-wheel *n*. Band *w w* from balance-wheel propels the little wheel *m*, which turns the wheel *l*, which carries the bow *k k*.

I am aware that other attempts have been made to invent an instrument having the qualities of piano and violin combined; but

What I claim as new for my instrument is as follows:

The combination of the bow-frame, having a wheel mounted at each end thereof, the bow or endless band stretched upon the wheels at the ends of the frame, bearings fastened to the bow-frame, and small rollers journaled therein, with the movable sounding-boxes having a string on each box, the rollers situated opposite the spaces between the strings, substantially as set forth.

RUFUS JESSE CLARK.

Witnesses:

FELIX W. JOHNSON,  
J. M. SMITHSON.