

(No Model.)

P. ANDERSON.  
PIANO.

No. 488,915.

Patented Dec. 27, 1892.

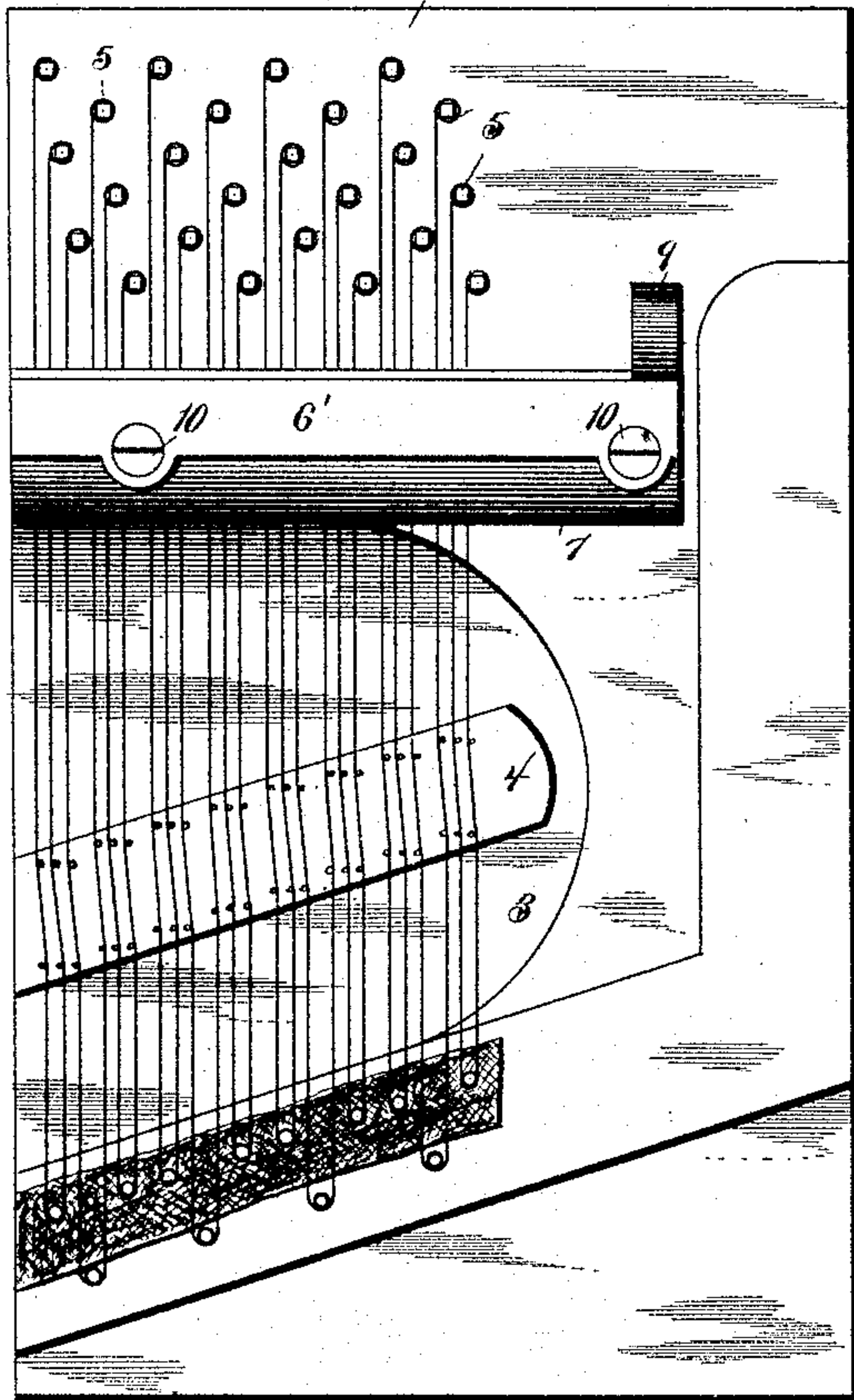
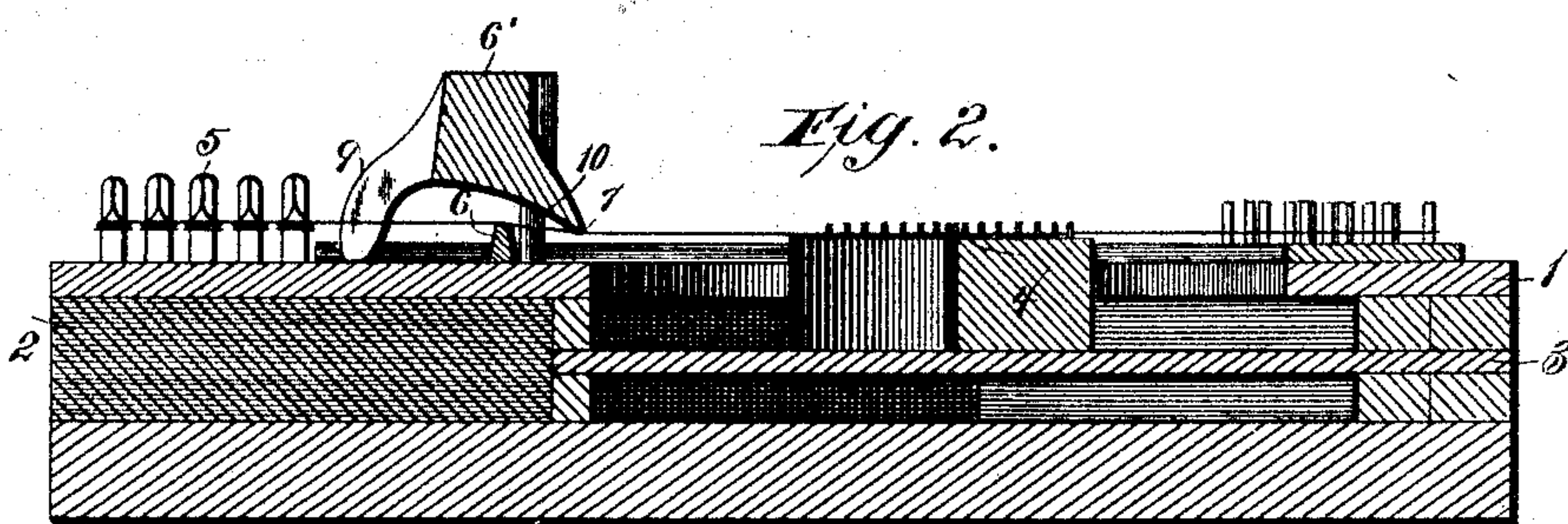
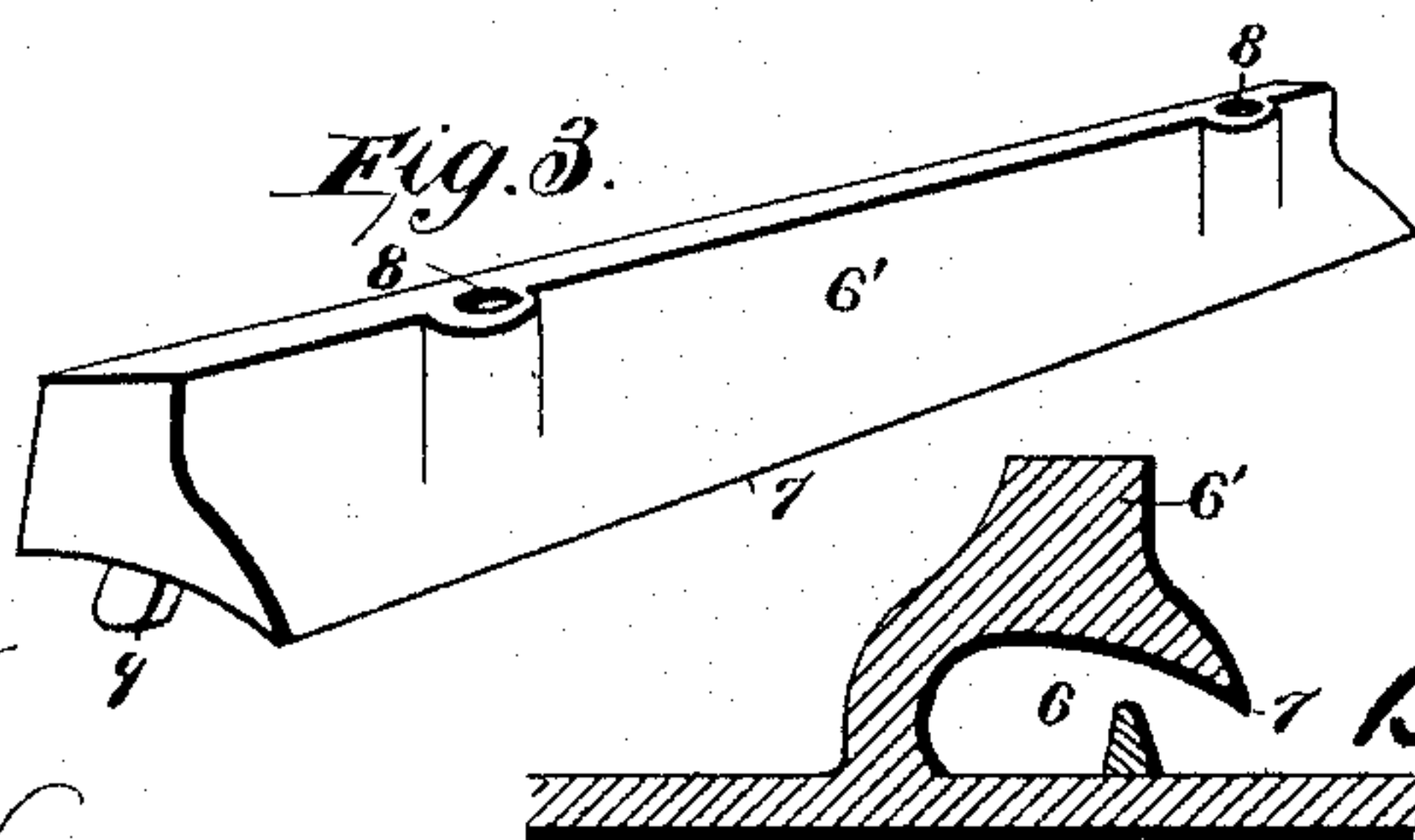


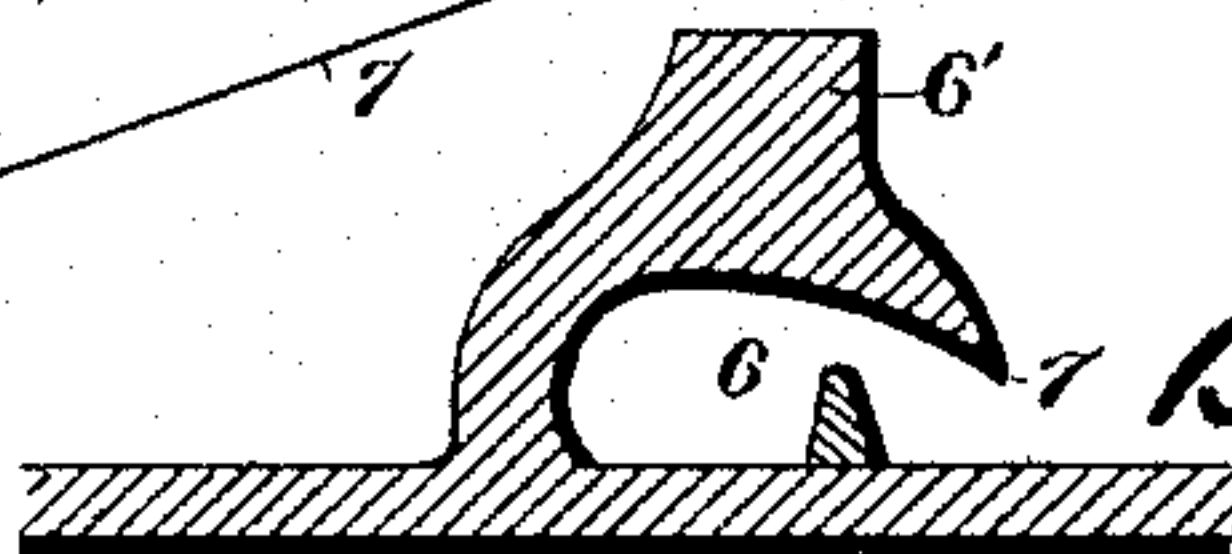
Fig. 1. ....



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

Witnesses

Louis G. Gulikn.

Eric S. Julehn

Inventor

*Peter Anderson*

By Captain & Clerk

Attorneys:



# UNITED STATES PATENT OFFICE.

PETER ANDERSON, OF NEW YORK, N. Y.

## PIANO.

SPECIFICATION forming part of Letters Patent No. 488,915, dated December 27, 1892.

Application filed July 28, 1892. Serial No. 441,481. (No model.)

*To all whom it may concern:*

Be it known that I, PETER ANDERSON, of the city, county, and State of New York, have invented certain new and useful Improvements in Pianos, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce improvements in the method of stringing pianos, and the devices employed for that purpose. Ordinarily the method of stringing a piano is to fasten the ends of the strings over the hitching pins at one end, and thence across the sounding board bridge, across a supporting part to the tuning pins, by which their tension is controlled. An objection to this mode of construction arises from the fact that the surface of the back part of the iron frame of every piano is uneven, so that when screwed in place upon the wrest-plank it does not rest solidly at all points. The consequence is that when the strings are in place a hollow sound between the uneven places is produced, and a brilliant clear tone is obtained where the plate rests solidly. By my invention I transfer the bearing from the plate or the like to the smooth even edge of a node bar in front of the supporting part on the plate, and consequently secure uniformly a brilliant clear tone. The efficiency of my node bar is increased by the fact that it makes contact with the plate at but few points, where a solid resting place may be conveniently provided.

In the accompanying drawings, Figure 1 represents a plan view of a portion of an upright piano for example; Fig. 2 is a cross section of a portion of the same, showing my node bar in position; Fig. 3 is a perspective of a portion of the node bar detached. Fig. 4 is a sectional view of my node bar cast integrally with its support or plate.

Referring to the figures on the drawings, 1 indicates the string plate of a piano of any ordinary or suitable construction.

2 indicates a wrest-plank or pin-block.

3 indicates a sounding board, and 4 a sounding board bridge.

5 indicates tuning pins, and 6 a bearing strip in proximity to them. Usually this bearing-strip is placed upon the front edge of the frame-plate wrest plank or tuning pin block so as to bring the entire vibratory lengths of the strings over the sounding-board. In my construction I relieve the bearing-strip of the office of supporting the end of the vibrating part of the string, and move it back from the edge of the plate, as illustrated.

6 indicates my node bar, which preferably consists of a metal casting provided with a smooth, straight bearing edge 7, screw-holes 8, and feet 9, upon the opposite side of the bar from the bearing edge, and preferably longer than the bearing edge so as to rest upon the frame plate when the bearing edge is set in position upon the strings.

10 indicates screws which are in practice adapted to pass through the screw-holes in the node bar, and into the frame-plate, preferably just in front of the bearing strip to hold the node bar in position. When placed in position the bearing edge of the node bar, taking the place of the bearing strip as ordinarily used, is brought in line with the front edge of the frame-plate so as to bring the nodes of the strings in line with the edge of the sounding board. The office of the screws is to draw the bearing edge of the node bar firmly against the strings, the node bar meantime resting upon its feet as a pivot. In practice the bearing edge of the node bar is screwed down a little lower than the top of the bearing strip, so that the strings are stretched as if from the bearing edge of the node bar itself, thereby rendering their tones remarkably clear and uniform.

What I claim is:—

1. The combination with a wrest plank of a piano, of a bearing strip on the upper surface of the same, over which the strings are stretched, and a node bar, concave on its under surface and fastened at one edge to the wrest plank, with the concave portion directly over the bearing strip, the free edge

of the node bar bearing upon the strings in front of the bearing strip, substantially as and for the purposes specified.

2. As a new article of manufacture, a node  
5 bar having a concave under surface, one edge of which is adapted to be secured to the wrest plank of a piano, so as to bring the concave surface of the node bar directly over a bearing strip thereon, and the other edge be-

ing adapted to bear upon the strings in front of said bearing strip, substantially as and for the purposes specified.

In testimony of all which I have hereunto subscribed my name.

PETER ANDERSON.

Witnesses:

PETER DUFFY,

L. J. S. NARBOURG.