

No. 865,460.

PATENTED SEPT. 10, 1907.

W. C. VOGEL & H. K. SNELL.
PIANO ACTION RAIL SUPPORT.

APPLICATION FILED NOV. 17, 1906.

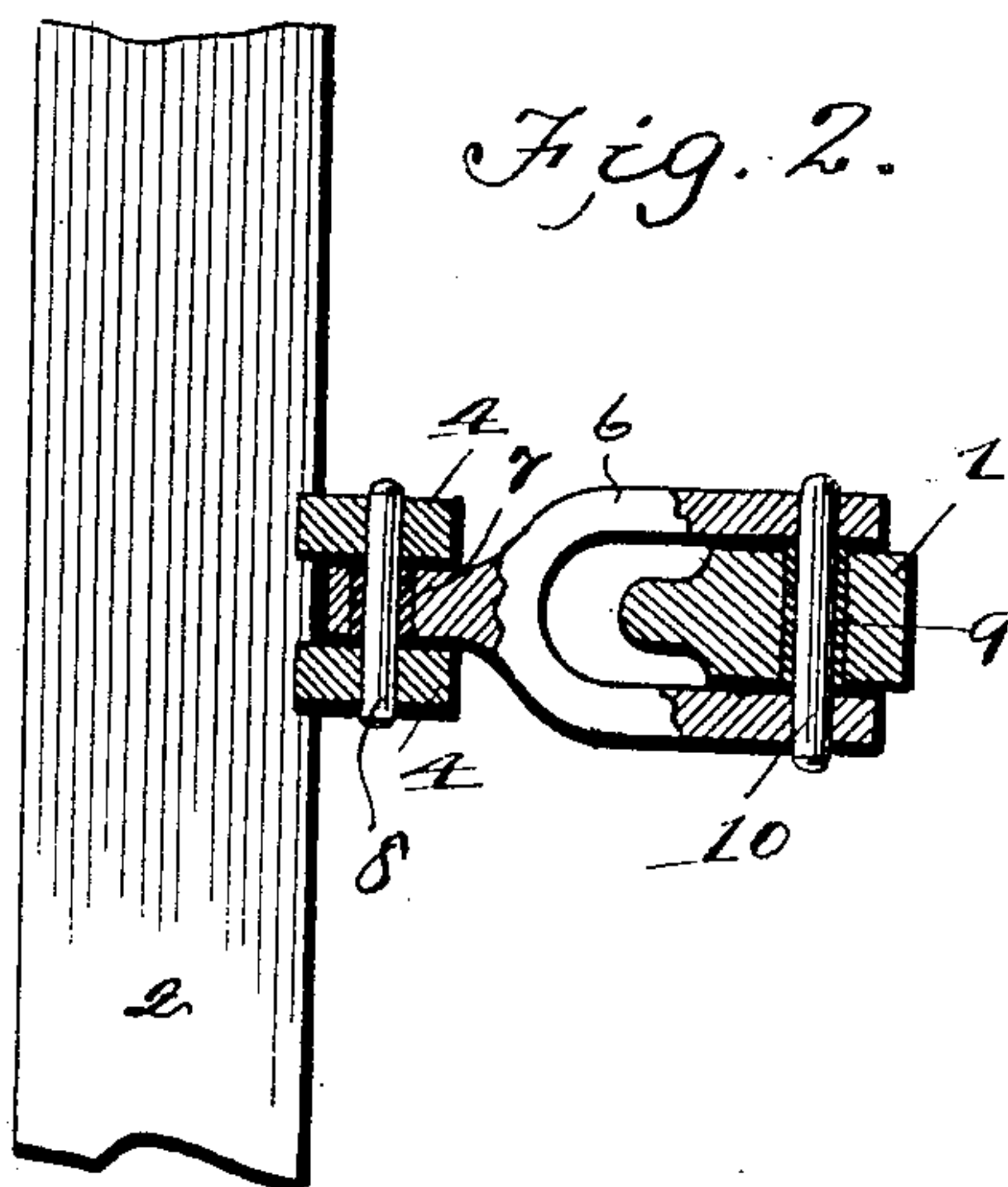
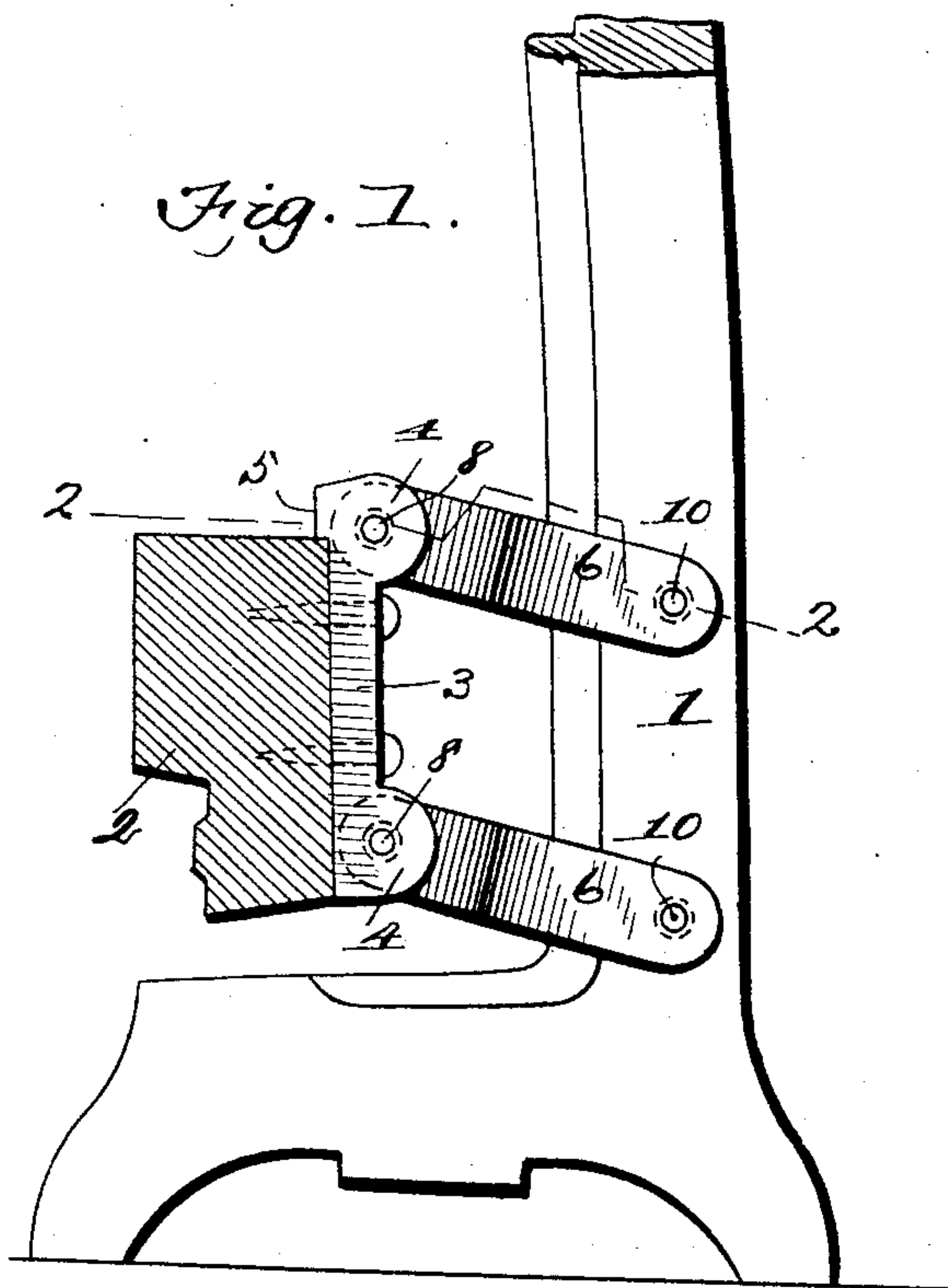


Fig. 3.

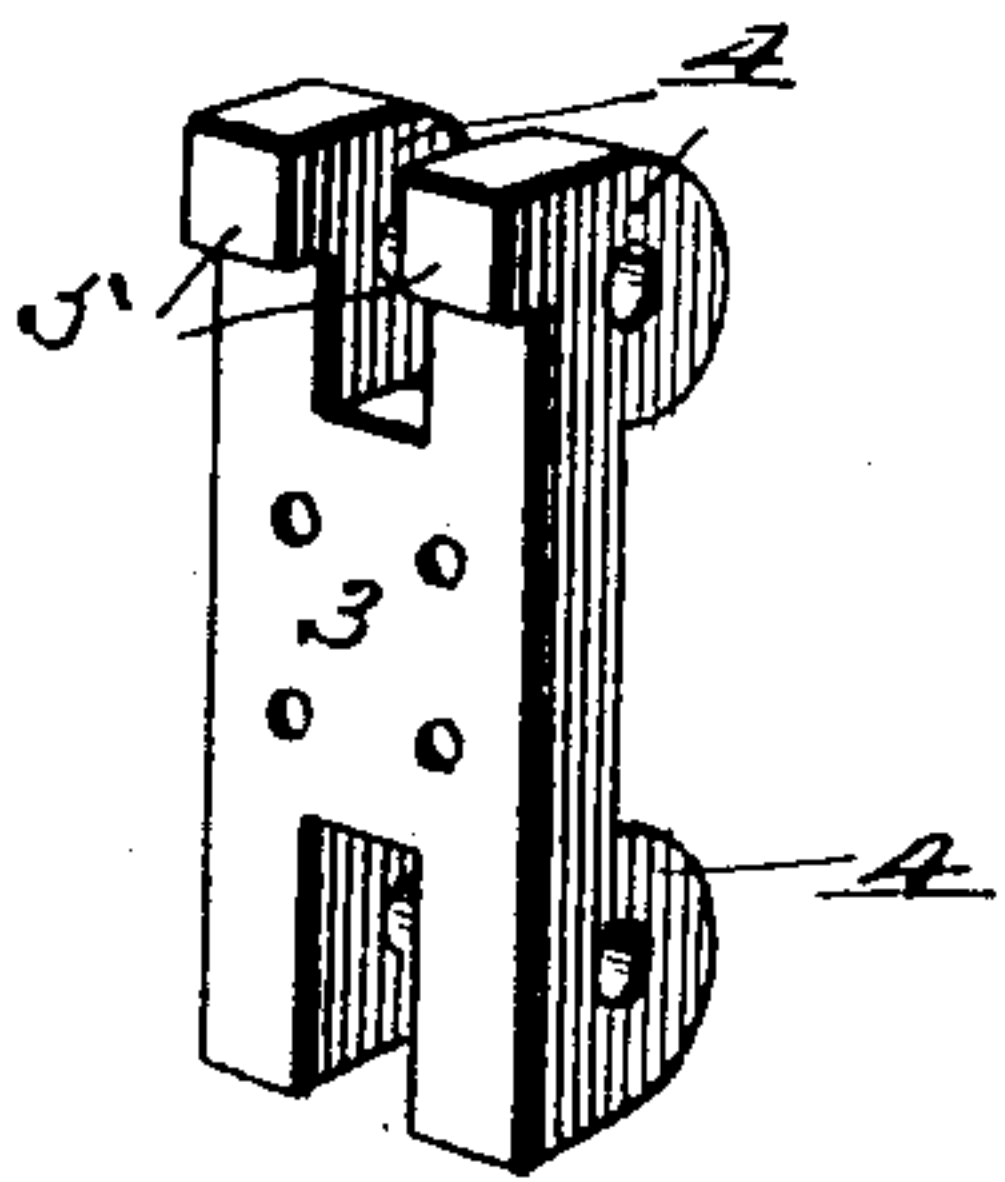


Fig. 4.

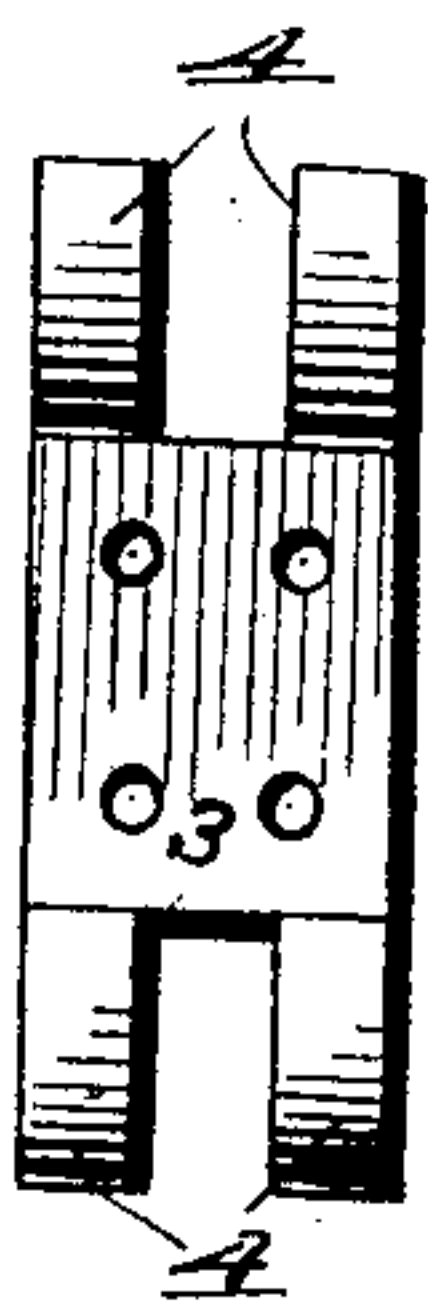
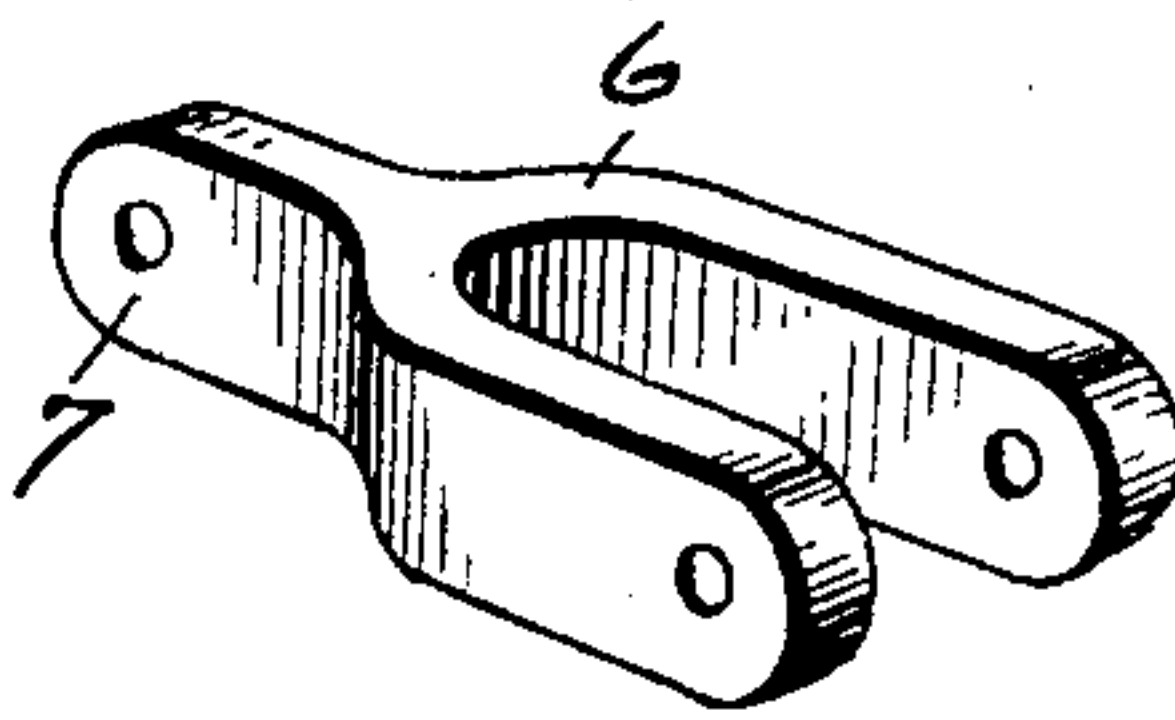


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PIANO-ACTION RAIL-SUPPORT.

No. 865,460.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed November 17, 1906. Serial No. 343,869.

To all whom it may concern:

Be it known that we, WILLIAM C. VOGEL and HARRY K. SNELL, citizens of the United States, both residing at Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Piano-Action Rail-Supports, of which the following is a specification.

This invention relates to an improvement of a piano action for which the application for Letters Patent was filed January 6, 1906 and given Serial Number 294,897.

The improvement relates especially to means for hinging the lower lever to the vertical action bracket.

The object of the invention is to reduce the amount of labor, and material required and also the amount of space occupied, so that the invention can be used upon a close scale where the various parts of a piano action are crowded closely together.

A further object is to increase the strength of the connecting parts between the lever rail and the action bracket by casting them in one piece and by reducing the number of pieces more room is gained as they occupy less space. The amount of bushing required is reduced and there is also a saving of time and labor in making and fitting the parts hereinafter shown and described.

The invention consists in the novel features of construction described in the specification, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a transverse section through a lower lever rail, showing a portion of a vertical action bracket and showing in side elevation the parts connecting the lever rail and the bracket. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a perspective view looking from the rear and side of a plate. Fig. 4 is a face view of the same plate. Fig. 5 is a perspective view of a link to connect the plate and the action of the bracket, the bushing being omitted.

In these drawings 1 represents the vertical action bracket and 2 the lower lever rail, which parts are shown and described in the application for patent above referred to and 3 represents a plate which is secured by screws upon the lever rail 2. This plate is

provided with upwardly and downwardly extending lugs 4 arranged in pairs and the upper pair of lugs have formed upon their rear faces projecting shoulder portions 5, which overhang and rest upon the upper face of the lever rail 2.

Two bifurcated links 6 are provided and the non-bifurcated end of each link is perforated and the perforation is provided with a suitable bushing, 7. These non-bifurcated ends fit between the lugs 4 of the plate 3 and are pivotally held in place by pins 8 which pass through the lugs and through the bushing 7. The vertical action bracket 1 is also provided with perforations in vertical alinement with each other in which are placed bushings 9 and the bifurcated end portions of the links 6 straddle the said action bracket and pins 10 pass through the said links and through the bushings 9 and pivotally connect the links to the action bracket.

It will be obvious that this construction pivotally connects the lower lever rail to the action bracket and permits the upward and forward movement described in pending application.

Having thus fully described our invention, what we claim as new and desire to secure by Letters Patent, is:—

1. In a piano, the combination with a lower lever rail and a vertical action bracket, a plate carried by the rail and having two pairs of lugs, links each having a bifurcated portion, the non-bifurcated end portion of each link resting between a pair of the said lugs, and the bifurcated portion straddling the vertical action bracket, and pins pivotally connecting said links to the plate and to the action bracket respectively.

2. A device of the kind described comprising in combination, a lower lever rail, a vertical action bracket, a plate having upwardly extending and depending lugs arranged in pairs, the upper lugs having shoulders formed thereon, said shoulders overhanging and resting upon the lever rail and links each bifurcated at their forward ends, the non-bifurcated ends of the links being pivoted between the lugs, and their bifurcated ends straddling the action bracket and being pivotally connected thereto, as and for the purpose set forth.

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