

UNITED STATES PATENT OFFICE.

WILLIAM B. TREMAINE, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO LUTHER G. BILLINGS, OF SAME PLACE.

IMPROVEMENT IN UPRIGHT PIANOS.

Specification forming part of Letters Patent No. 195,691, dated September 25, 1877; application filed April 20, 1877.

To all whom it may concern:

Be it known that I, WILLIAM B. TREMAINE, of city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Upright Pianos; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in upright pianos; and the object is to provide means for supporting the action, and, at the same time, strengthening the upper part of the piano-case.

The invention consists of a tubular bar, made of metal or other suitable material, arranged crosswise in the upper part of the piano-case. This tubular bar is secured to the inner sides of the upper part of the piano-case by reversible nuts or their equivalents, which are secured to the piano-case by screws or in any other suitable manner, by forming a firm and secure support for the brackets sustaining the action. The brackets are secured to the bar by set-screws, or by other suitable means, thus avoiding the necessity of boring holes in the wrest plank or plate, for the purpose of sustaining the action, and weakening the piano, as is now the practice, at the same time greatly strengthening the sides of the piano-case, and preventing them from splitting or spreading, as is the tendency in the cases of all upright pianos now in use.

Figure I represents a front view of an upright piano with my improvements attached, and having the top fret removed. Fig. II is a side view of the same, partly in section.

In the drawing, A represents the case of an upright piano, of any suitable construction,

with the usual keys and other parts. In the upper part of the case a tubular bar, B, made of metal or other suitable material, is firmly secured to the sides of the piano case A by reversible nuts C C, or in any other suitable manner, preventing the spreading of the piano-case, as is liable with the ordinary upright piano. To this tubular bar B the brackets D D D D, which sustain the action, are then attached, and firmly secured in proper position by means of the set-screws E E E E, or by any other suitable device, thus securing the action in a firm and immovable manner.

The great advantages of my improvement are, that the action is firmly held in position without weakening plate or wrest-plank by the boring of holes for bolts to support the action, which is now in general use, and, at the same time, strengthening the upper part of the piano, and preventing the sides from splitting, in an ornamental, simple, light, and durable manner. It can be applied to old as well as new pianos at a reasonable cost.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In upright pianos, a tubular action and case sustaining bar, arranged substantially as shown, and for the purposes herein specified.

2. In upright pianos, a combination of the tubular bar B with the reversible nuts C C and brackets D D D D, for sustaining the action as well as bracing the sides of the piano, when arranged substantially as herein shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM B. TREMAINE.

Witnesses:

A. W. BILLINGS,
CHAS. B. LAWSON.