S. MENNIG.

Stringing Devices for Pianos.

No. 204,908. Patented June 18, 1878.

FIG. 1.

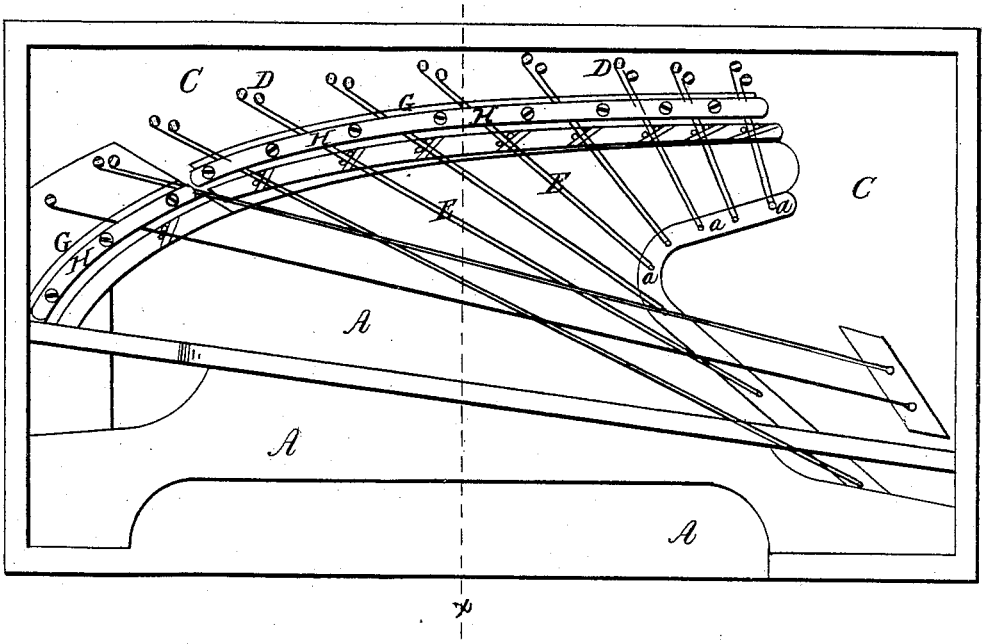


FIG. 2.

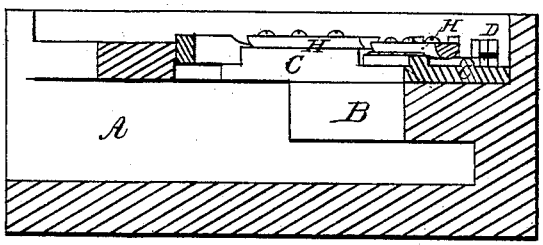
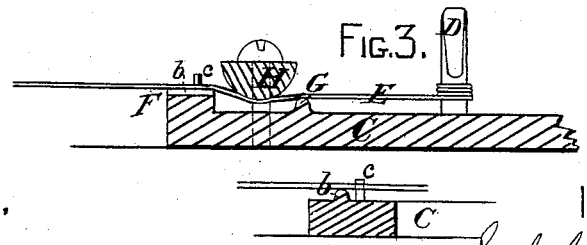


FIG. 3.



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SEEBALD MENNIG, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN STRINGING DEVICES FOR PIANOS.

Specification forming part of Letters Patent No. **204,908**, dated June 18, 1878; application filed October 26, 1877.

To all whom it may concern:

Be it known that I, SEEBALD MENNIG, of Brooklyn, Kings county, State of New York, have invented certain Improvements in Piano-Fortes, of which the following is a specification:

My invention relates principally to square pianos, or such as have their strings horizontal, although it may be applied and used with advantage to other kinds of instruments. The improvement is confined to the devices for securing the strings to the iron frame of the piano; and consists in a novel construction, combination, and arrangement of parts, which have for their object to more securely hold the strings down on the bridge, prevent their breaking, and improve their fastening and bearings on the plate, and also their sounding quality, as will be fully hereinafter set forth.

In the drawings hereto annexed, and forming part of this specification, Figure 1 is a plan view of a square piano embodying my improvements. Fig. 2 is a transverse section through *x x*, Fig. 1; and Fig. 3 are sectional detail views, enlarged.

A represents the body of the piano, constructed as usual. B is the wrest-plank, to which is secured the metallic frame C, similar in general shape to those in ordinary use. D represents the tuning-pins, to which the extremities of the wires E are secured, and *a a* are the hitch-pins, around which the wires pass, as usual.

By referring to Fig. 3 it will be seen that there are two bearing-points for the wires on the metallic plate C—one, F, toward its outer edge, which one may be termed the "bridge," and another, G, behind this bridge, which may be termed a "bead-rest." These bearings are a sufficient distance apart, parallel, and are preferably cast on the metallic frame C.

The bridge F is provided with projections *b* and bridge-pins *c*, for supporting the downward and lateral pressure of the strings and rendering the members of each double string of similar length, as will be readily understood. The bridge-pins *c* are inserted immediately behind the projections *b*, and their only function is that of keeping the strings in position laterally, the projection *b* from the bridge serving as the terminal point of the vibrating portion of the string.

The strings are, as usual, secured to the tuning-pins D and hitch-pins *a a*, and passed over the projections *b* on the iron-plate bridge F, and against the pins *c* thereon. A metallic pressure bar or strip, H, is then brought to bear down on the portion of the strings between the bridge F and bead-rest G, so as to slightly curve the string between these two supports, as shown at Fig. 3, and insure its permanent and firm bearing on them.

The pressure-bar H is in transverse section semicircular, the convex side being, of course, the side which bears on the strings. It is held down by any suitable number of screws, and may be made in one piece or in sections. In the drawings a separate section is shown for the extreme bass-strings, which is necessary or more convenient, inasmuch as the bearings of these strings are above the level of those of the other strings.

The bead-rest G is somewhat lower than the bridge F, so as to permit of the strings being wound as near to the base of the tuning-pins as possible.

With the above-described arrangement and combination of parts the string is firmly held down upon the bridge against the action of the hammer, which has a tendency to raise it from its bearings, while at the same time the bead-rest G prevents the strings accidentally running down the tuning-pins in the act of winding them thereon or in tuning the piano, and thus obviates the danger of their coming in contact with the metal plate and breaking.

I claim—

1. The combination, with the stringing-plate C, provided with bridge or support F, forming the terminal bearing of the vibrating portion of the string, the bead-rest G, and the tuning-pins D, of the pressure-bar H, situated between the bridge F and bead-rest G, constructed and arranged to operate substantially in the manner described and specified.

2. The bridge F, provided with the projections *b*, forming the terminal bearing of the vibrating portion of the string, and the bridge-pins *c*, situated immediately behind said rests or projections, for the purpose of retaining the strings in position laterally, constructed and operating substantially in the manner described and specified.

SEEBALD MENNIG.

Witnesses:
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