

No. 754,869.

PATENTED MAR. 15, 1904.

E. HILGER.
WREST PLATE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL.

Fig. 1.

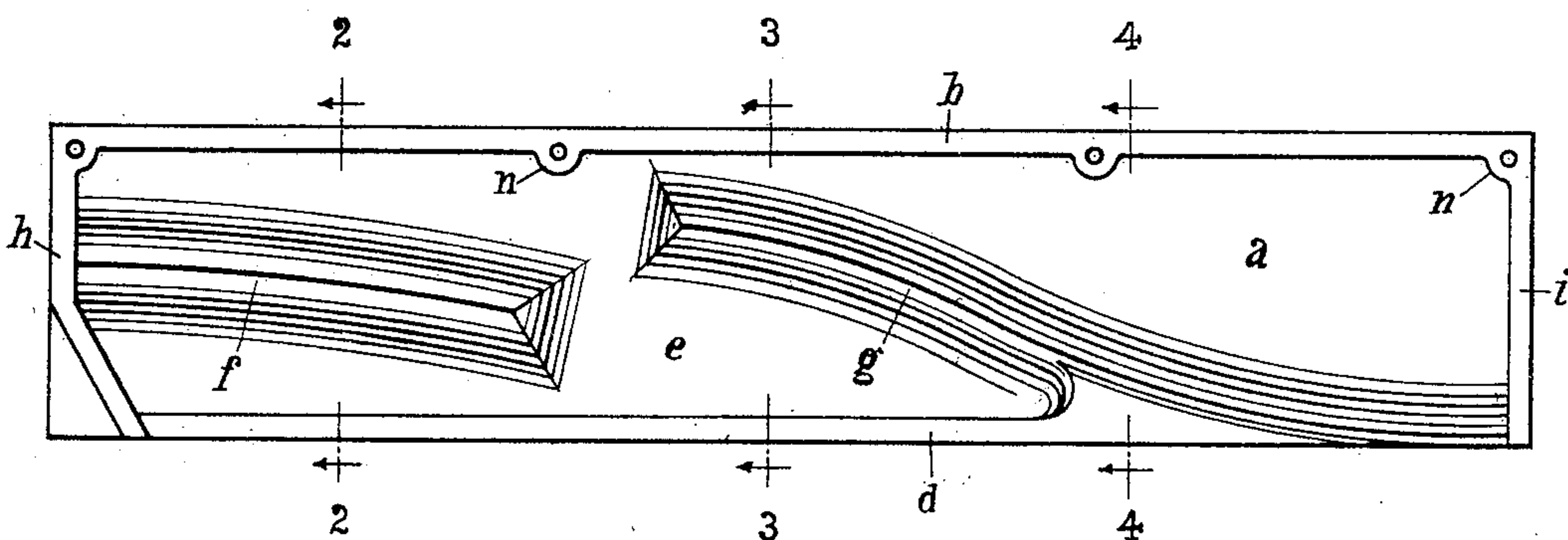


Fig. 2.

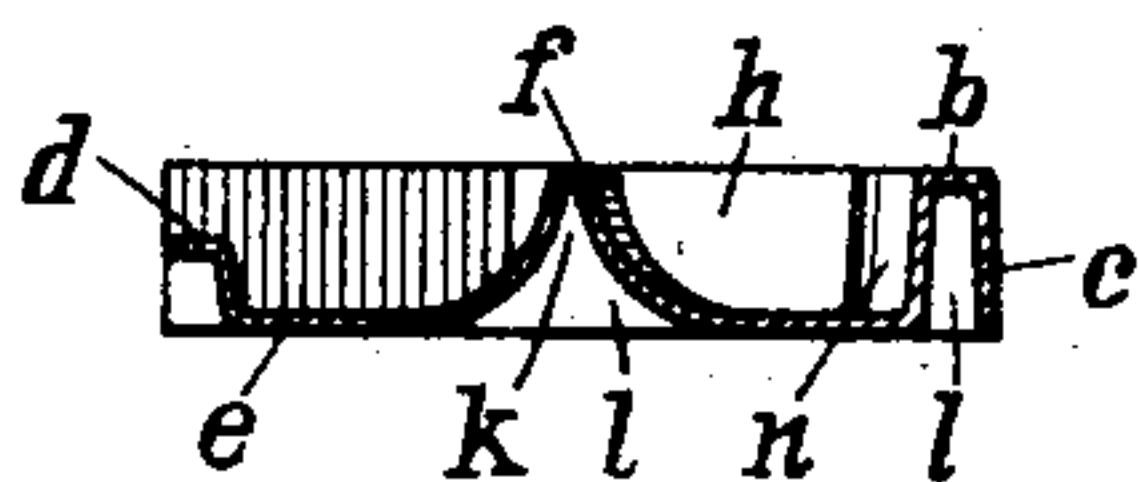


Fig. 3.

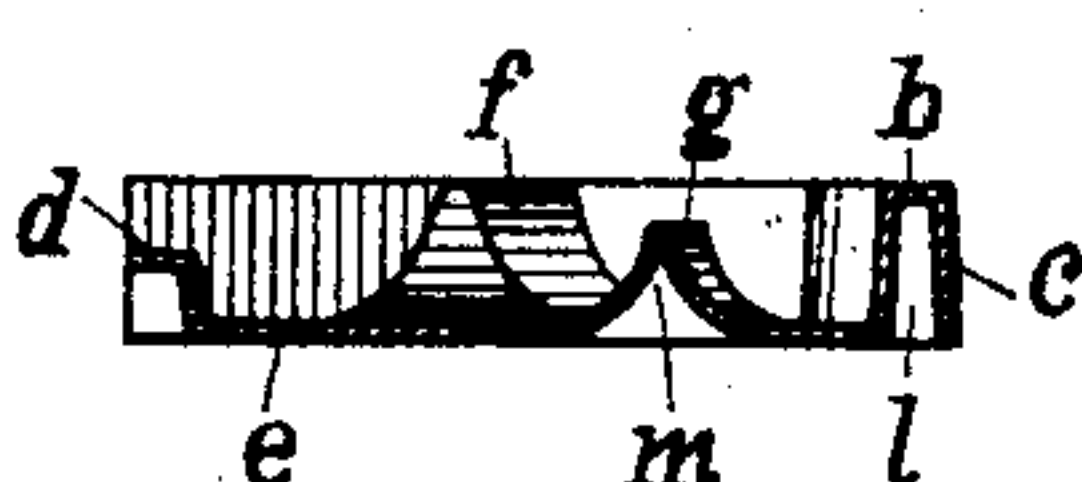
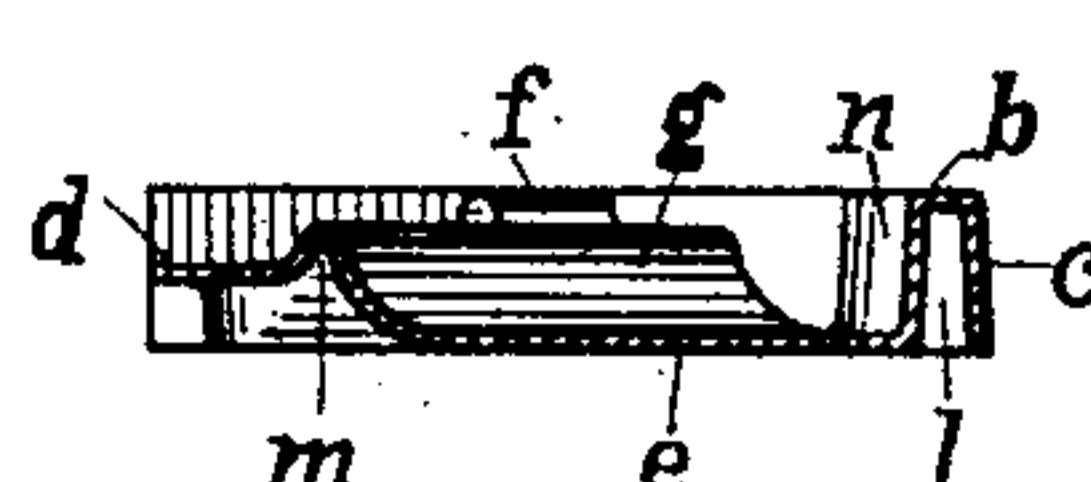


Fig. 4.



Witnesses:

F. G. Harder.

Carl Friedrich.

Inventor:

Eduard Hilger

per Martin Schmetz

Attorney.

UNITED STATES PATENT OFFICE.

EDUARD HILGER, OF AIX-LA-CHAPELLE, GERMANY.

WREST-PLATE.

SPECIFICATION forming part of Letters Patent No. 754,869, dated March 15, 1904.

Application filed January 26, 1903. Serial No. 140,491. (No model.)

To all whom it may concern:

Be it known that I, EDUARD HILGER, piano-forte manufacturer, a subject of the King of Prussia, Emperor of Germany, residing at 10 Corneliusstrasse, Aix-la-Chapelle, in the Kingdom of Prussia, Empire of Germany, have invented certain new and useful Improvements in Wrest-Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to wrest-plates for pianofortes, pianos, and similar instruments which in opposition to older wrest-plates of this class are provided with hollow bass and treble bridges whose cavities are in communication with the cavity of the raised border thereof, for which reason a stronger and more sonorous sound is obtained than hitherto has been possible.

In the accompanying drawings, Figure 1 is a plan view of the wrest-plate. Figs. 2 to 4 are cross-sectional views thereof, taken on the lines 2 2, 3 3, and 4 4, respectively.

The metal wrest-plate *a* shown here may be pressed or cast to obtain the desired shape. The highest portion of the raised border *b* is practically running along three sides of said wrest-plate and provided with an outer side wall *c*, whereas the lower portion *d* of said border *b* is left without an outer side wall to admit of conveniently connecting the portion *d* with other parts of the instrument—i. e., this portion *d* is secured to the usual string-plate or string-frame in such a manner that no rattling sound can be emitted by the joint; but care must be taken not to close up the mouths of the bent portion of the border *b* and the short straight wing *i* of the latter, to permit the sound-waves formed within the bass and treble bridges and the hollow border *b* to freely make their exit from the cavities of these several parts. Neither a string-plate nor a string-frame is shown here, as such form no part of this invention. The web *e* is connected with both portions of the border *b* and carries the bass-bridge *f* and the treble-bridge *g*, which in opposition to the

usual bass and treble bridges are made hollow. The end of the bass-bridge *f* in juxtaposition to the angular portion *h* of the hollow border *b* is connected therewith in such a manner that the cavity *k* of the bass-bridge *f* merges into the cavity *l* of the border *b*. In a similar manner the cavity *m* of the treble-bridge *g* is merging into the shorter straight wing *i* of the higher portion of the border *b*; but at the same time it is also connected with the lower portion *d* of said border *b*. By making the bass and treble bridges hollow and letting their cavities merge into the cavities of the different portions of the border of the wrest-plate not only a stronger and more sonorous sound is obtained, but in doing so every part of the wrest-plate can be made of equal thickness also, thus greatly aiding in obtaining the advantageous results.

Bosses *n* are formed on the border *b* for securing the wrest-plate in place. As the pegs for fastening and regulating the tension of the strings are secured as usually, neither the pegs nor the holes in the wrest-plate for letting said pegs pass are shown, as these are forming no part of this invention.

It will be understood that changes in the construction may be resorted to without departing from the spirit of my invention—as, for instance, forming the several bridges separately and securing them to the web *e* afterward or making the border higher or lower, as shown here.

I claim—

In a wrest-plate for pianofortes and similar instruments the combination with the web, of a hollow border, a hollow bass-bridge whose cavity is in communication with the cavity of said border, and a hollow treble-bridge whose cavity is also communicating with the cavity of said border.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

EDUARD HILGER.

Witnesses:

HENRY QUOWFLIEG,
M. RÜTTON.