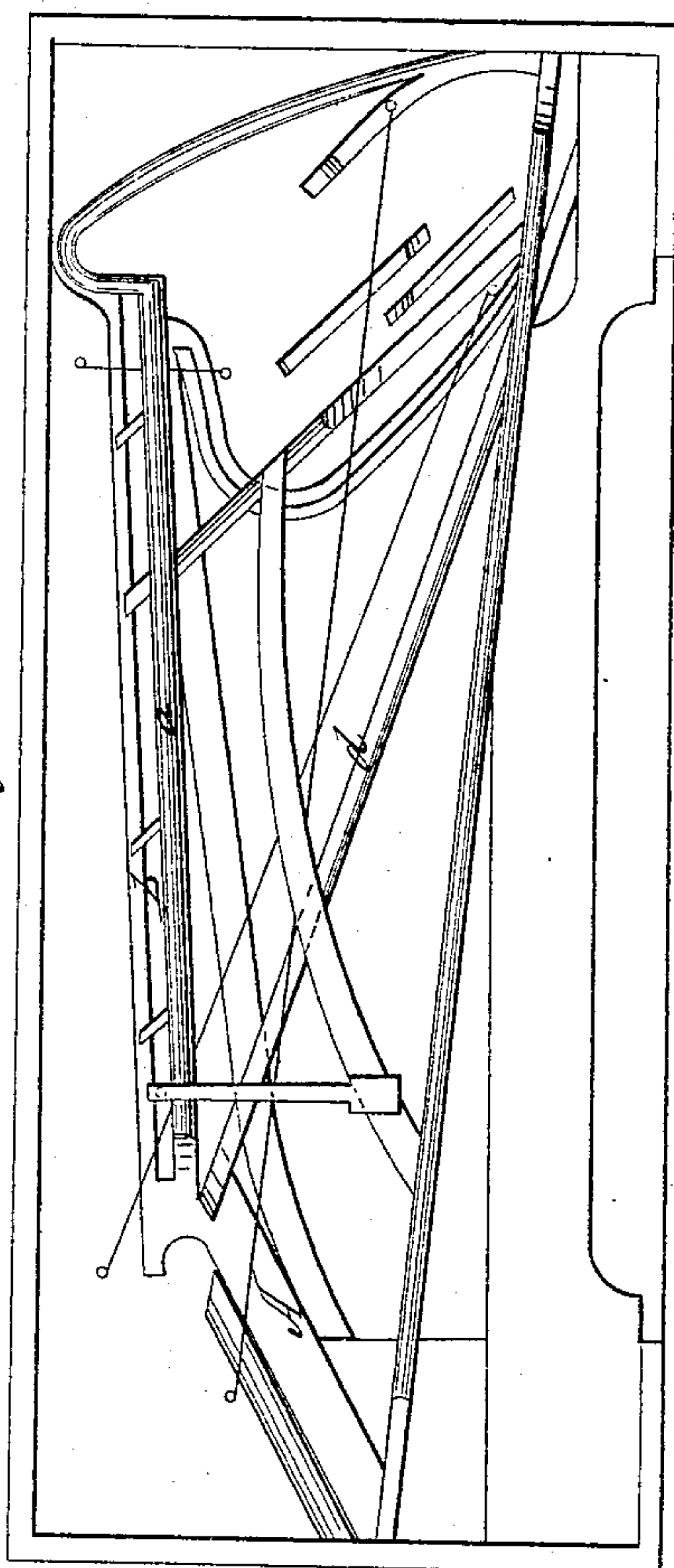
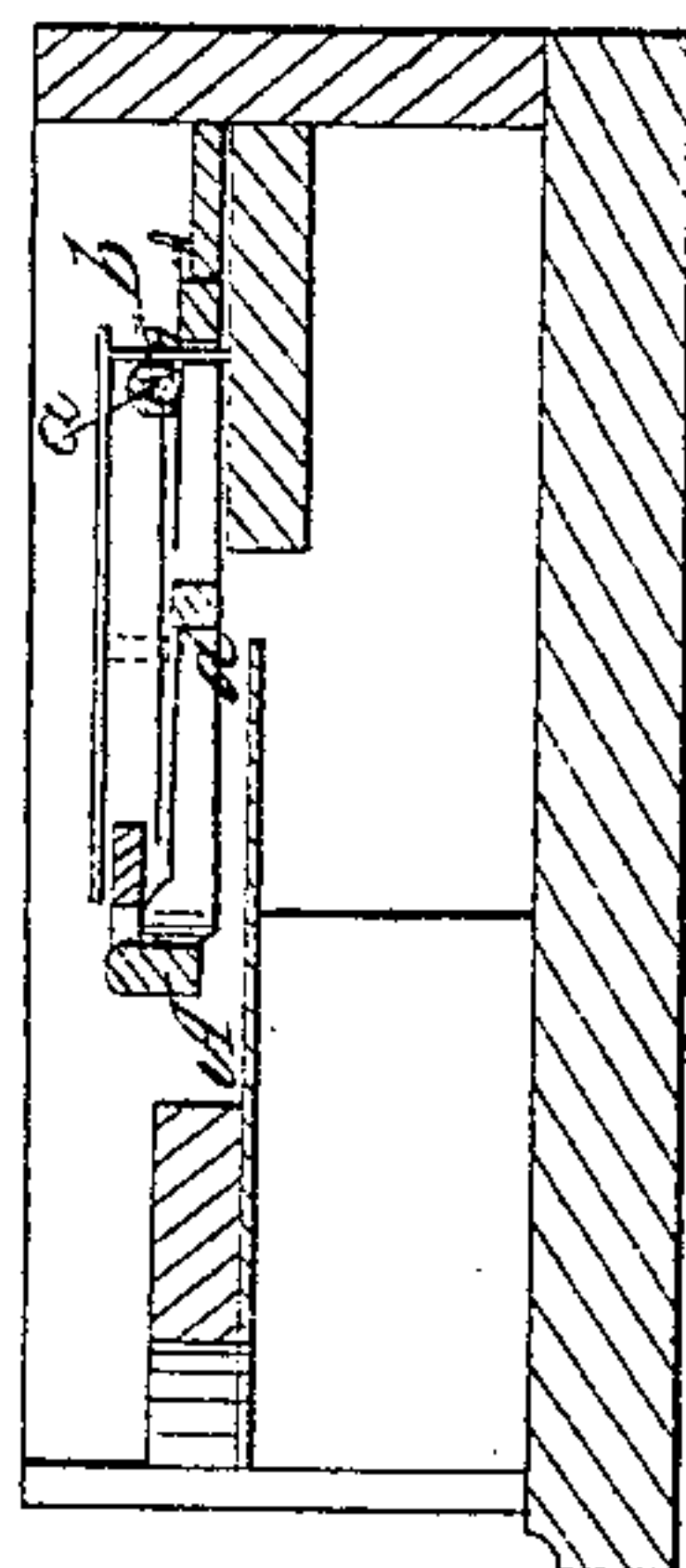


*G. C. Manner,*  
*Piano,*  
*No 59,619,* *Patented Nov. 13, 1866.*

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*F. St. Jackson.*  
*Theo. Fusch*

*Inventor:*  
*G. C. Manner*  
*Per Wm. H. L.*  
*Attorney*

# UNITED STATES PATENT OFFICE.

G. C. MANNER, OF NEW YORK, N. Y.

## IMPROVEMENT IN PIANO-FORTES.

Specification forming part of Letters Patent No. **59,619**, dated November 13, 1866.

*To all whom it may concern:*

Be it known that I, G. C. MANNER, of the city, county, and State of New York, have invented a new and useful Improvement in Piano-Fortes; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a plan or top view of the invention. Fig. 2 is a transverse vertical section of the same.

Similar letters of reference indicate like parts.

In this piano a slot in the metal frame allows of placing the damper-lifters behind the point supporting the string, and the application of French damper-levers over the bridge is rendered practicable.

A represents the metal frame of a piano-forte, which is made in the form shown in Fig. 1 of the drawings. It is secured in the wood-work of the piano-forte in such a position that the same is entirely in front of the tuning-pins, and thereby the wrest-plank is firmly supported in its position and the tuning-pins are prevented from working loose.

My frame is provided with a bridge, *a*, which is cast with said frame, and against the lower edge of which the strings bear. This bridge is cast hollow and filled in with ivory, which

forms the bearing-points for the strings, and thereby the iron tone is avoided, which inevitably follows if the strings bear directly against metal. For the filling I use ivory by preference, since I find that by doing so the richness and brilliancy of the tone are materially enhanced.

Between the bridge *a* and the side of the frame A a slot, *b*, is left, through which work the damper-lifters behind the point supporting the string, so that the ordinary French damper-levers can be applied and carried over the bridge *a*, and thereby the construction of the mechanism of the piano-forte is materially facilitated.

The frame A is strengthened by a bar, *d*, which extends diagonally across the same and parallel to the lower strings. By this bar the strain of said lower strings is counteracted, and a comparatively light frame can be used with perfect safety.

What I claim as new, and desire to secure by Letters Patent, is—

Placing the damper-lifters in a slot of the metal frame behind the point supporting the strings, substantially as and for the purpose described.

G. C. MANNER.

Witnesses:

WM. F. MCNAMARA,  
ALEX. F. ROBERTS.