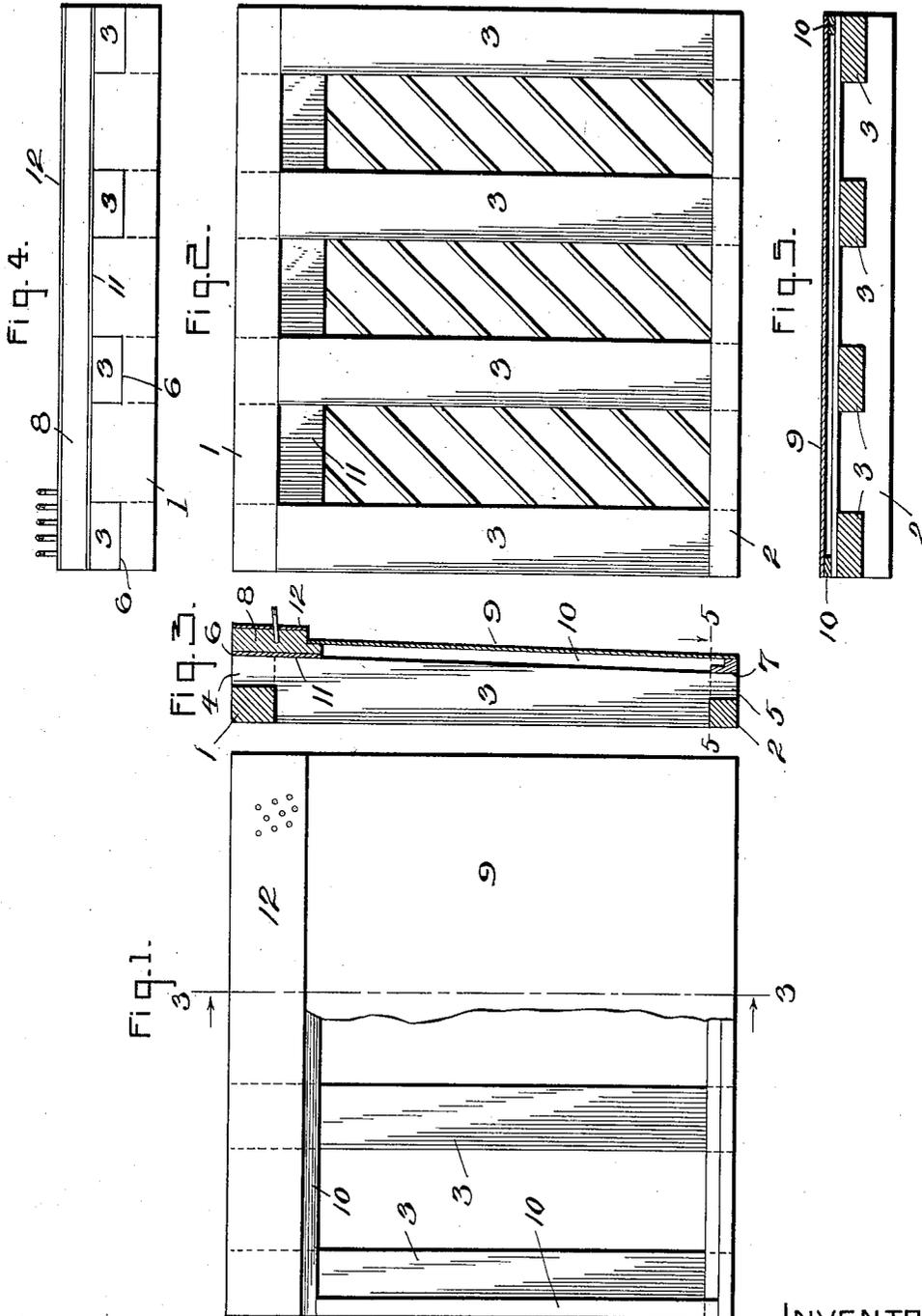


1,155,295.

Patented Sept. 28, 1915.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

WILLIAM G. BETZ, OF CHICAGO, ILLINOIS.

## PIANO-BACK.

1,155,295.

Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed April 25, 1914. Serial No. 834,346.

*To all whom it may concern:*

Be it known that I, WILLIAM G. BETZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Piano-Backs, of which the following is a specification.

This invention relates to the construction of the back or brack-frame of pianos.

As hitherto usually constructed, such backs were composed of a series of posts and space-blocks glued between the posts at their upper and lower ends. This construction is unsatisfactory in that it is unduly heavy and expensive and lacks the requisite strength and durability.

The object of my invention is the construction of a durable back which shall possess great strength and rigidity in proportion to its weight and at the same time be relatively inexpensive.

In the accompanying drawings: Figure 1 is a front view of the piano-back with the sounding board partly broken away. Fig. 2 is a rear view thereof. Fig. 3 is a transverse section on line 3—3, Fig. 1. Fig. 4 is a top plan view of the back, and Fig. 5 is a horizontal section on line 5—5, Fig. 3.

Similar characters of reference indicate corresponding parts throughout the several views.

The improved back comprises a head-piece, strip or plate 1, preferably of wood, extending continuously from end to end of the piano; a similar continuous base-piece or sill 2, and suitably spaced posts 3 provided at their upper and lower ends with tenons 4 and 5, seated in corresponding mortises 6 and 7 formed in said head and base pieces, respectively, as best shown in

Figs. 3, 4 and 5. These tenons may be glued or otherwise secured in said mortises. As shown, the tenons are preferably located at the front or inner edges of the posts. This produces a very strong and rigid construction which does away with the space-blocks heretofore employed and which is at the same time lighter and less expensive than such block-construction, as it requires less lumber and involves less labor. It is also much more durable.

8 indicates the pin-block extending across the upper front sides of the several posts 3 and suitably secured thereto; 9 the sounding board, and 10 the customary lining between said board and the posts 3.

The back of the pin-block is preferably cross-banded or reinforced by one or more plies 11 of veneer having their grain running at an angle to that of the block and firmly glued thereto. This construction greatly strenghtens the pin-block and prevents its cracking or checking under the strain on the tuning pins and in screwing them into the block.

If desired, the front side of the pin block may also be cross-banded, as shown at 12.

I claim as my invention:

A piano-back comprising head and base pieces, posts secured at their ends to said head and base pieces, a pin-block secured to the front sides of said posts, and a reinforcing ply secured to the rear side of the pin-block and bearing against the posts.

Witness my hand this 20th day of April, 1914.

WILLIAM G. BETZ.

Witnesses:

C. F. GEYER,  
E. M. GRAHAM.