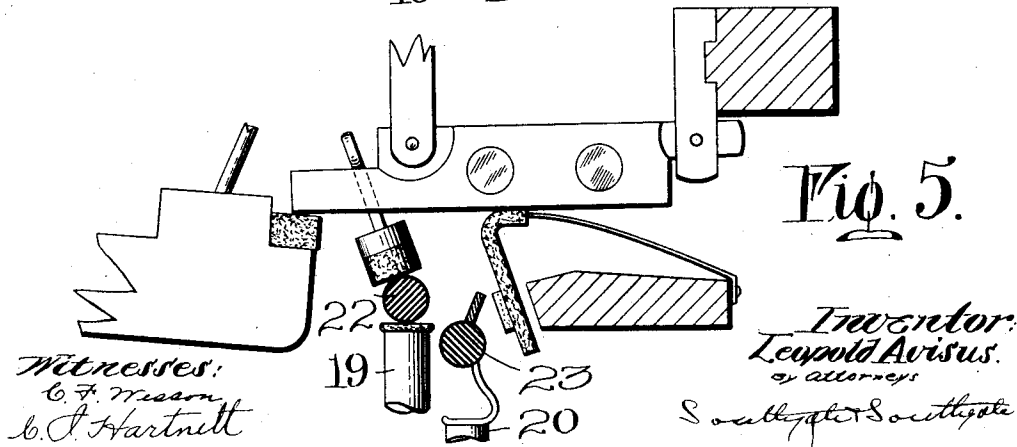
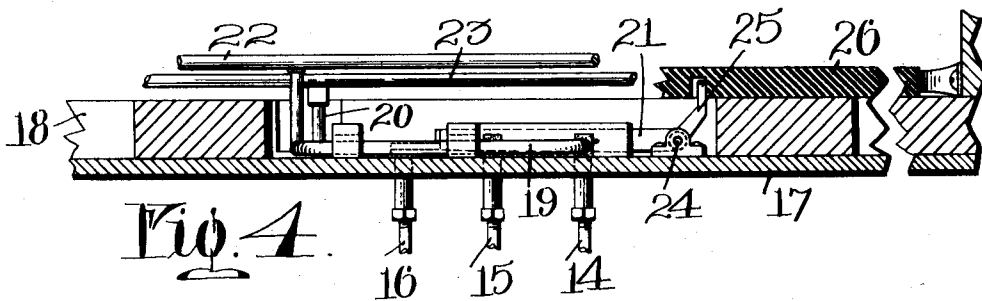
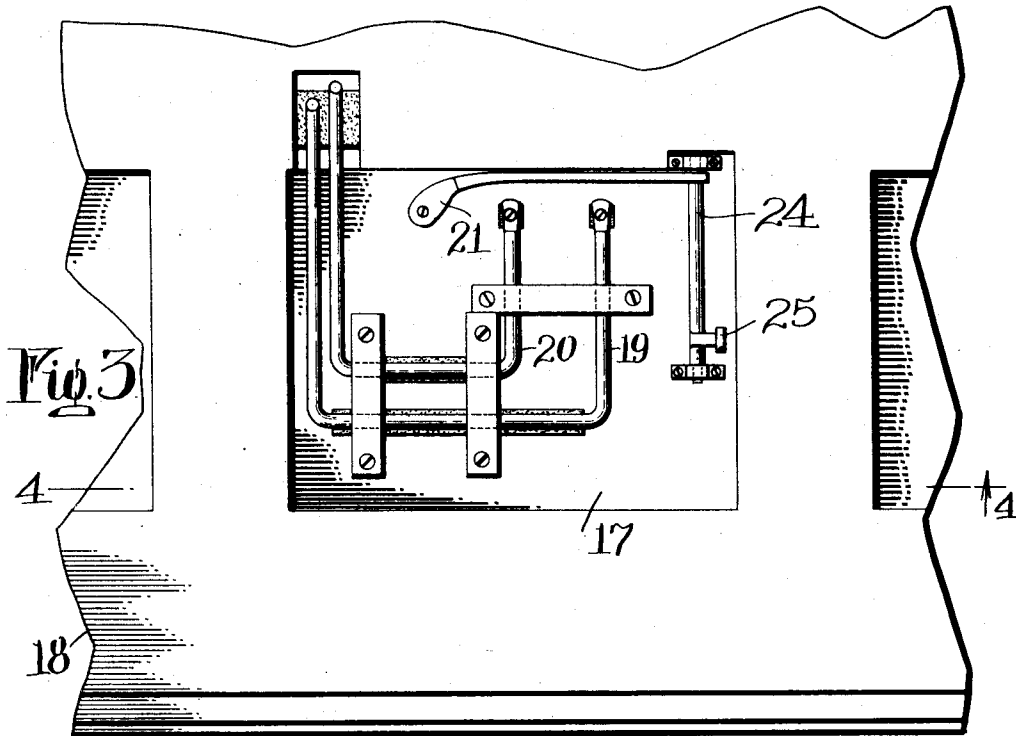


L. AVISUS.
 PEDAL CONNECTION FOR GRAND PIANOS.
 APPLICATION FILED NOV. 1, 1912.

1,166,964.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

LEOPOLD AVISUS, OF NEW YORK, N. Y., ASSIGNOR TO BRAMBACH PIANO COMPANY,
OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

PEDAL CONNECTION FOR GRAND PIANOS.

1,166,964.

Specification of Letters Patent.

Patented Jan. 4, 1916.

Application filed November 1, 1912. Serial No. 728,974.

To all whom it may concern:

Be it known that I, LEOPOLD AVISUS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Pedal Connections for Grand Pianos, of which the following is a specification.

This invention relates to a grand piano construction and the principal objects thereof are to provide an arrangement for the pedal connections whereby they can be housed within the grand piano without forming projections thereon or otherwise showing that the connections are present.

Reference is to be had to the accompanying drawings in which,

Figure 1 is a vertical longitudinal sectional view of a portion of a grand piano showing a preferred form of the invention applied thereto, Fig. 2 is a front elevation of the lower part thereof, Fig. 3 is a plan of the bottom of the casing showing the connections therein, Fig. 4 is a sectional view on the line 4—4 of Fig. 3, and Fig. 5 is a sectional view on enlarged scale similar to a portion of Fig. 1.

A grand piano casing of ordinary construction is shown having the usual key frame, action and strings and provided with a depending support 10 for the usual three pedals, namely, the loud or forte pedal 11, the sostenuto pedal 12, and the soft pedal or key bed shifter 13. These, as usual in this class of instruments, are provided with connections 14, 15 and 16 in the form of rods extending upwardly, but instead of having connections outside the casing and underneath the same where they are readily observable, these three rods extend up into the case itself through a plate 17 which is thin as compared with the bottom board or key bed 18 and extends across the instrument. Above it is a chamber cut out of the said key bed. The operating connections are located in this chamber and are shown as comprising three members 19, 20 and 21 connected respectively with the rods 14, 15 and 16. The member 19 which is operated by the loud pedal is pivoted on the plate 17 and has an arm extending back in the instrument to operate the usual connections 22 for producing the loud or forte effect. The member 20 is of similar form and location and is connected with the usual devices 23 for producing the sostenuto effect. The

member 21 is secured to a rock shaft 24 which is provided with another arm 25 which in the usual manner shifts the key frame 26 for the purpose of producing the soft pedal effect as is well understood in this art. By locating these three sets of connections in a depression or opening in the key bed 18 under the key frame 26 it will be seen that they are entirely out of the way and out of sight and yet that they are of simpler form and cheaper construction than when located as usual outside the instrument. At the same time when the key frame is removed these parts are exposed and can be repaired or taken out if necessary without any material trouble or complications. The plate can be taken out if desired with the pedals and connections without disturbing the key frame.

Although I have illustrated and described only a single embodiment of the invention I am aware of the fact that modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction shown and described, but

What I do claim is:—

1. A grand piano having, in combination, an inclosing casing, expression-controlling connections located entirely within the casing, pedals below the casing, and rods extending upwardly from the pedals to said connections within the casing and effective to operate said expression-controlling connections.

2. A grand piano having, in combination, a key bed, a key frame mounted on the key bed, said key bed having an opening therein under the key frame, a set of pedals below said opening, rods extending upwardly from said pedals into said opening, and expression-controlling connections located in said opening and operable by said rods.

3. A grand piano having, in combination, a key bed having a passage therethrough, a plate on the bottom of the key bed covering said passage, pedals located below said plate, expression-controlling connections supported on said plate in said passage, and rods extending upwardly from the pedals through the plate and effective to operate said expression-controlling connections.

4. A grand piano having, in combination,

an inclosing casing comprising a key bed
having an opening therein, a plurality of ex-
pression controlling devices, connecting
members for actuating said devices mounted
5 in said opening and above the plane of the
lower surface of said key bed, a plurality
of pedals, and connections from said pedals
to said members.

In testimony whereof I have hereunto set
my hand, in the presence of two subscribing 10
witnesses.

LEOPOLD AVISUS.

Witnesses:

MARK P. CAMPBELL,
CHAS. F. UMBSTATTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."