

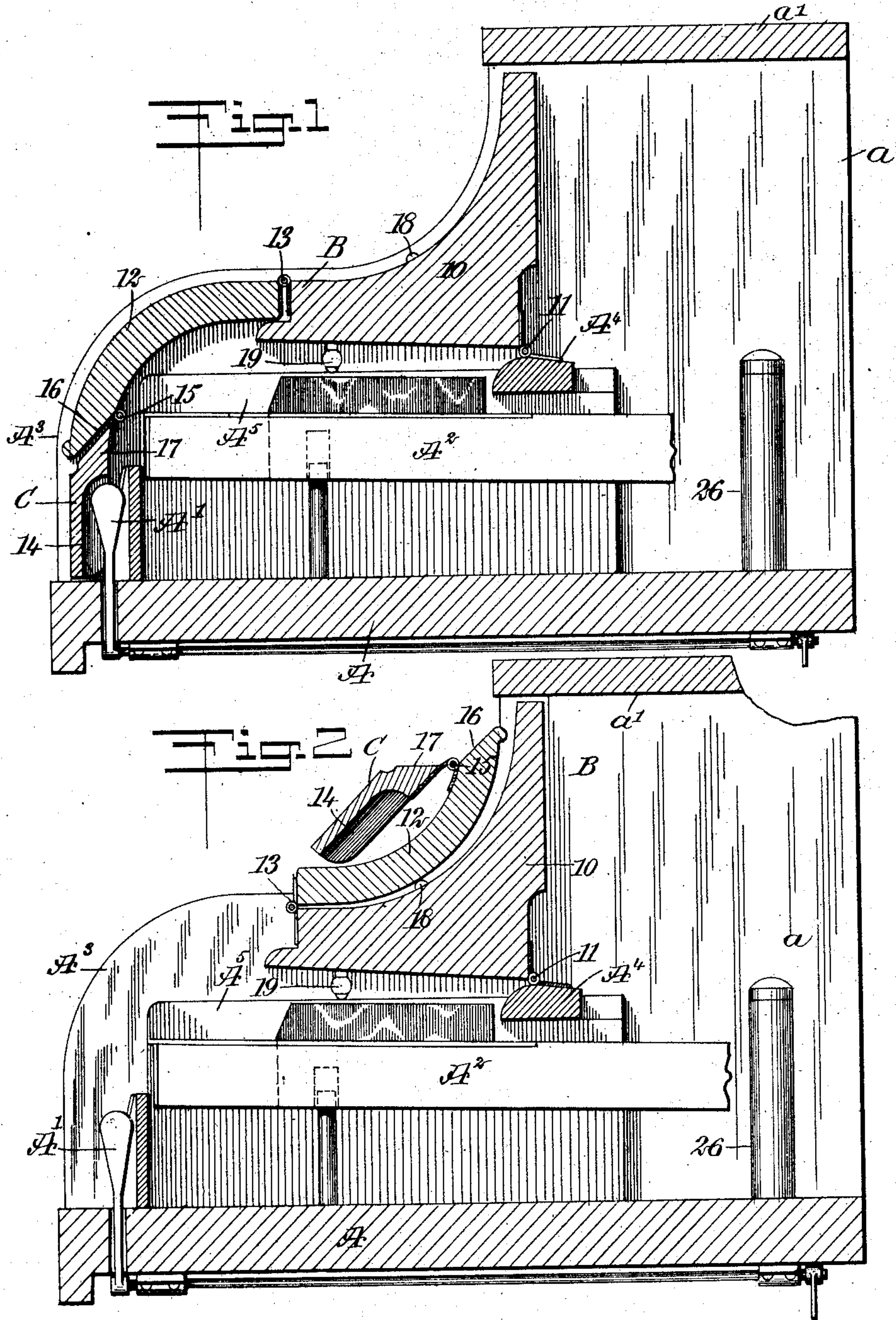
No. 882,433.

PATENTED MAR. 17, 1908.

R. K. THUMLER.
LOCK SLIP FOR AUTOMATIC PIANOS.

APPLICATION FILED OCT. 14, 1907.

2 SHEETS—SHEET 1.



WITNESSES
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W. H. Sweet.

INVENTOR
Robert K. Thumler
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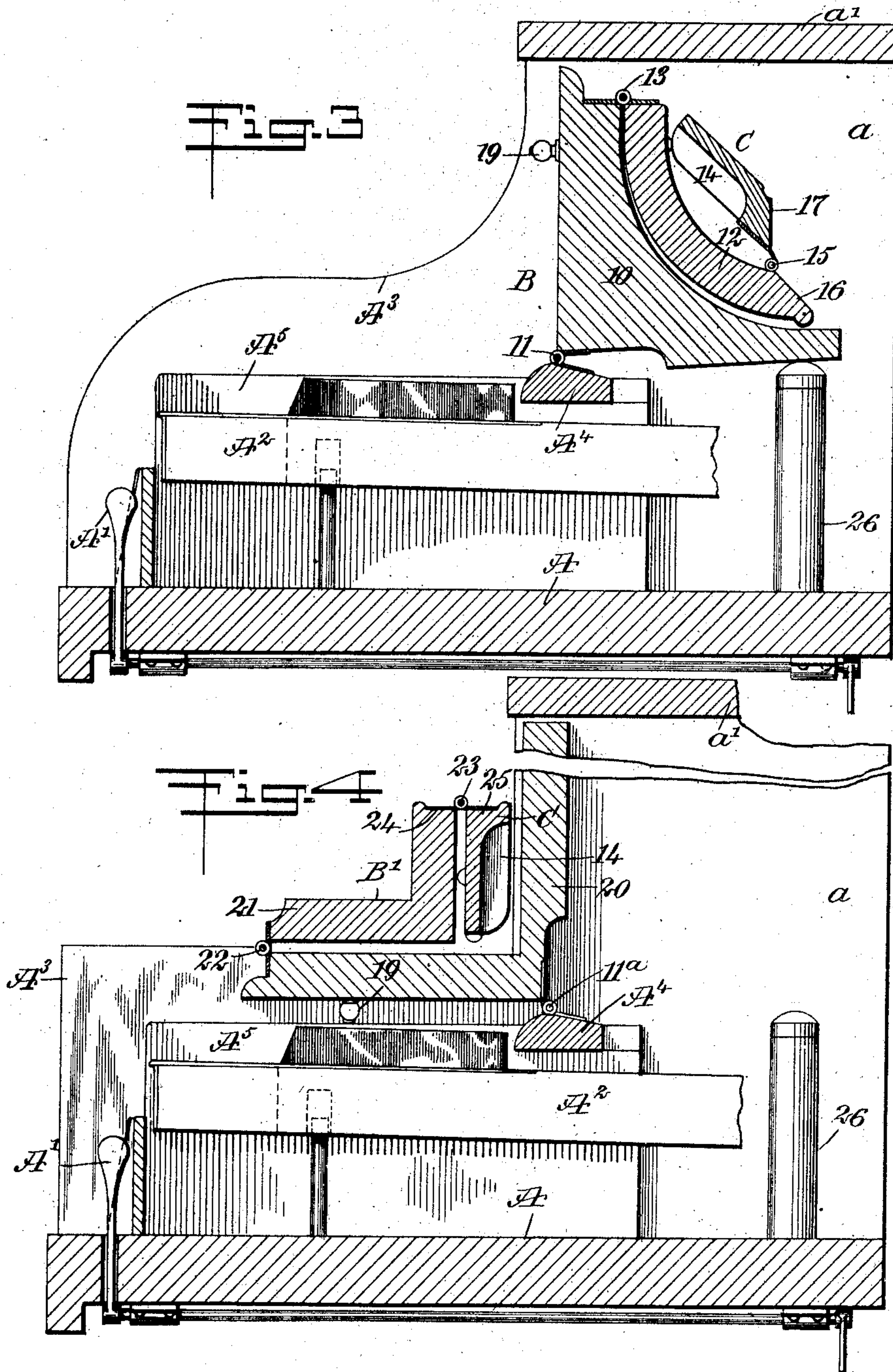
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F. D. Sweet.
[Signature]

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UNITED STATES PATENT OFFICE.

ROBERT K. THUMLER, OF NEW YORK, N. Y., ASSIGNOR TO HENRY & S. G. LINDEMAN, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

LOCK-SLIP FOR AUTOMATIC PIANOS.

No. 882,433.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed October 14, 1907. Serial No. 397,278.

To all whom it may concern:

Be it known that I, ROBERT K. THUMLER, a citizen of the United States, and a resident of the city of New York, borough of The Bronx, in the county and State of New York, have invented a new and useful Improvement in Lock-Slips for Automatic Pianos, of which the following is a full, clear, and exact description.

My invention relates to lock slips for automatic pianos, and employed to protect and conceal the expression levers, which lock slips have heretofore been attached to the keyboard to drop down therefrom, and consequently have been more or less unsightly as well as being in the way of the person operating the said expression levers.

The purpose of this invention is to provide an attachment of the lock slip to the fall of the piano, the attachment being so made that when the fall is raised the lock slip will fold up therewith out of the way, and when the fall is lowered to closing position over the keyboard, the lock slip will automatically drop in place over the expression levers.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical transverse section through the keyboard of an upright piano, a fall, and a lock slip, illustrating the two latter parts in closed relation to the keyboard and expression levers; Fig. 2 is a similar view showing the fall and lock slip partially folded; Fig. 3 is a view similar to that shown in Figs. 1 and 2, but illustrates the fall and connected lock slip folded to full open position; and Fig. 4 is a vertical transverse section through the keyboard of a piano and the fall, illustrating the adaptation of the lock slip to swing in an outward direction.

A represents the keyboard of an upright piano; A' one of the expression levers employed in connection with an automatic piano; A² represents the keys, A³ one of the cheek pieces, A⁴ the name board, and A⁵ the key block. The fall B is made as is customary in two sections, namely, a rear section 10 that is connected by hinges 11 with the name board A⁴, and a forward section 12 that is

connected by a hinge 13 with the rear section 10, the forward section 12 being adapted to fold up upon the forward face of the rear section 10 when the fall B is of the conventional curved type illustrated in Figs. 1, 2, and 3.

C represents the lock slip, which is provided with recesses 14 to receive the handle portions of the expression levers A', and the said lock slip at its upper edge is connected with the lower edge portion of the lower or forward section 12 of the fall B by suitable hinges 15, ordinarily located at the inner faces of the said fall and lock slip. When the fall B is of the curved or ogee type shown in Figs. 1, 2, and 3, the inner edge 16 of the forward section 12 of the fall and the upper edge 17 of the lock slip C, are correspondingly inclined.

When the fall is in its closed position, the lock slip rests upon the keyboard A adjacent to its forward edge, as is shown in Fig. 1, and a stop 19 extending down from the rear section 10 of the fall rests upon the key block A⁵. When the keyboard is to be exposed, the lower or forward section 12 of the fall B is carried upward upon the outer face of the rear or upper section 10 of the said fall, as is shown in Fig. 2, and rests upon suitable buffers 18, carried by the said rear section 10, and at such time the lock slip C will rest upon the inner concaved face of the forward section 12; next, as is customary, the fall is carried further backward into the space between the sides *a* of the body of the piano and the top *a'*, as is illustrated in Fig. 3, the lock slip still having bearing upon the concaved face of the forward or lower section 12 of the fall, as is illustrated in Fig. 3, thus entirely exposing the keyboard and carrying the lock slip away from the operator, and when the fall is in its full open position shown in Fig. 3, the rear section 10 thereof rests upon a stop 26 extending from the keyboard A within the rear or body portion of the instrument.

In Fig. 4 I have illustrated the adaptation of the lock slip C to what is known as a square fall. This square fall also consists of a rear section 20 which is of angular construction, and a forward or lower section 21, likewise of angular construction. The rear section 20 is connected with the main board A⁴ by hinges 11^a, and hinges 22 connect the two sections 20 and 21 of the fall. In this type of fall a hinge 23, connects the lock slip

with the lower edge of the forward or lower section 21 of the fall, which in this instance is designated as B', but the opposing edges 24 and 25 of the said lower or forward section 5 of the fall and the lock slip C are in this instance practically straight, but I desire it to be understood that I do not limit myself to any particular means of closing connection between the fall employed and the lock slip.

10 When the fall is in the open position shown in Fig. 3, and it is desired to close the instrument, the fall is carried forward in the customary manner and as the forward or lower section of the fall drops down to its closing 15 position, the lock slip C automatically drops to its protected position relatively to the expression levers A'.

When the fall is of the curved or ogee type, the lock slip rests upon the forward face of the 20 lower member or section when in its first folded position, as is shown in Fig. 2, but the said lock slip may be made to drop to the rear of the said lower member of the fall, as is illustrated in Fig. 4. It will be understood 25 that the lock slip can be made a portion of a fall of any type.

Having thus described my invention, I claim as new and desire to secure by Letters Patent,—

30 1. In automatic pianos, the combination

with the keyboard, expression levers carried by said keyboard in front of the keys thereof and the fall board of the instrument, of a lock slip adapted to cover said expression levers, which lock slip is carried by and constitutes a portion of said fall board. 35

2. In automatic pianos, the combination with the keyboard, expression levers carried by the keyboard and the fall board of the instrument, of a lock slip for said expression 40 levers hinged to the fall board and adapted when the fall board is lowered to cover the expression levers and to fold upon the fall board when the latter is opened.

3. In automatic pianos, the combination 45 with the expression levers of the instrument and its fall board, of a lock slip hinged to the lower edge of the fall board, being capable of folding upward thereon or downward therefrom, which lock slip when the fall is down 50 conceals and protects the expression levers, and when the fall is raised folds thereon out of the way.

In testimony whereof I have signed my name to this specification in the presence of 55 two subscribing witnesses.

ROBERT K. THUMLER.

Witnesses:

ALFRED E. SCHAEFER,

JOHN NORZ.