

No. 804,210.

PATENTED NOV. 14, 1905.

J. W. BUTTERFIELD & B. C. SCHMITT.
STEREOTYPE PLATE AND BASE CONNECTION.

APPLICATION FILED FEB. 13, 1904.

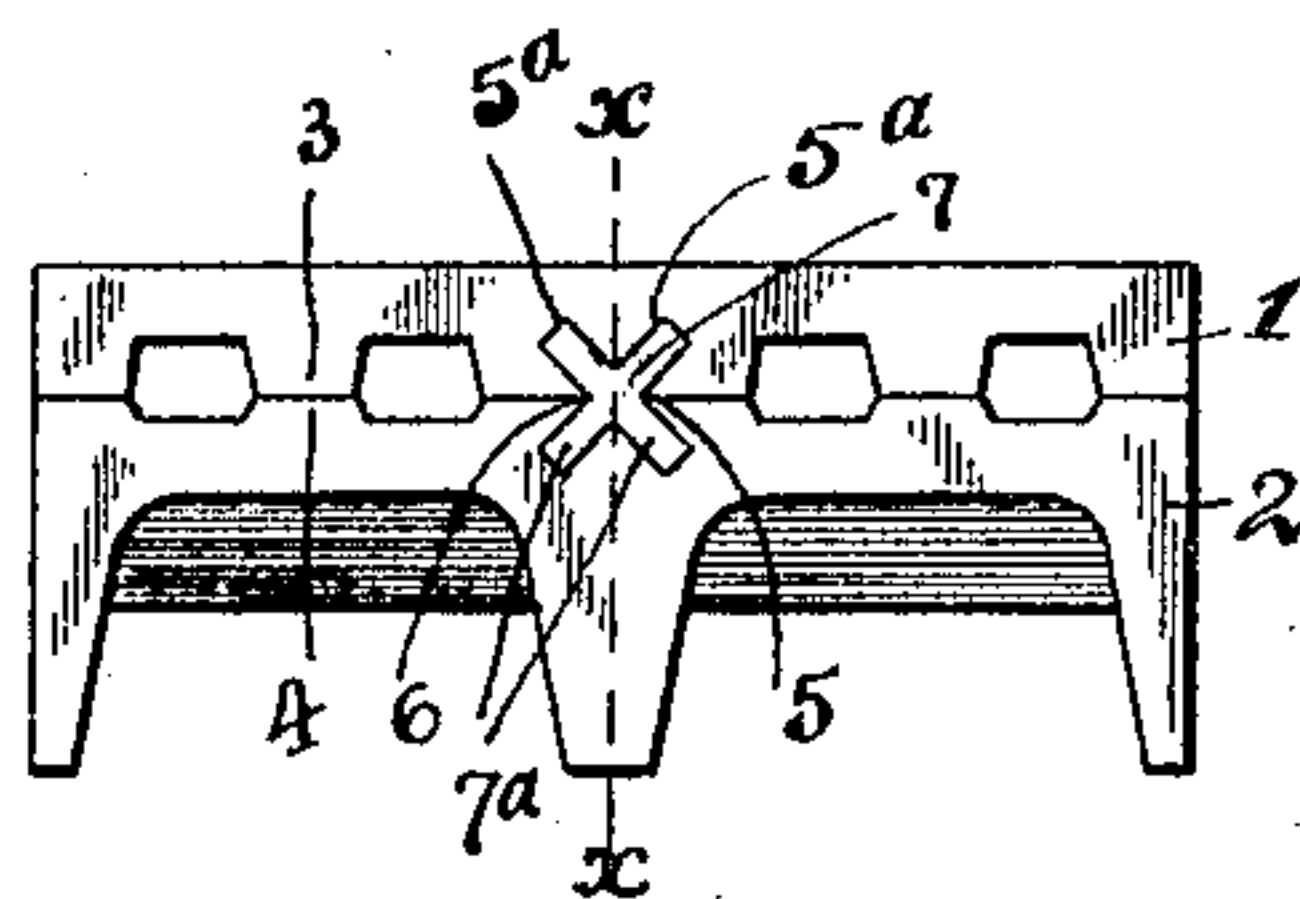


Fig. 1.

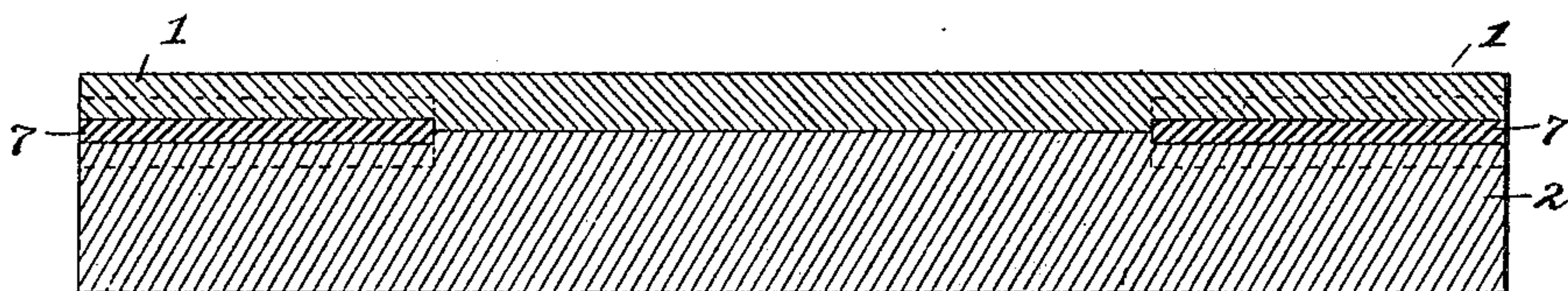


Fig. 2.

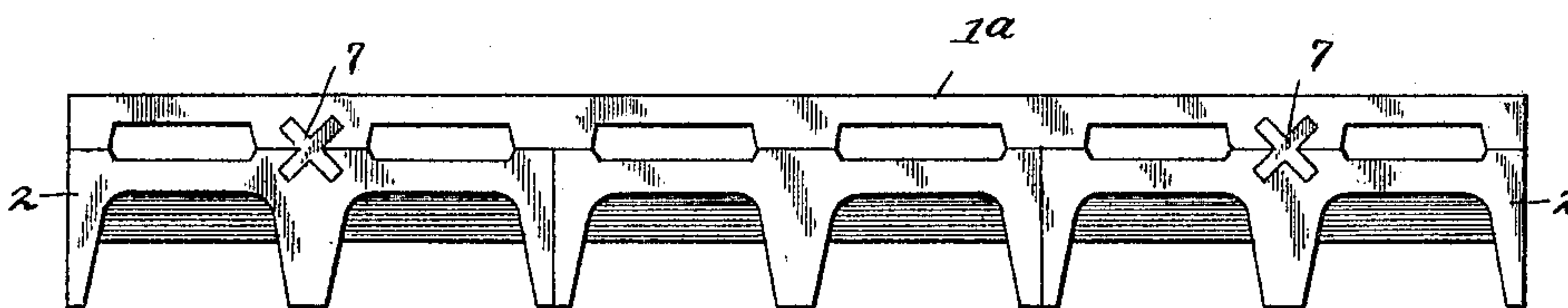


Fig. 3.

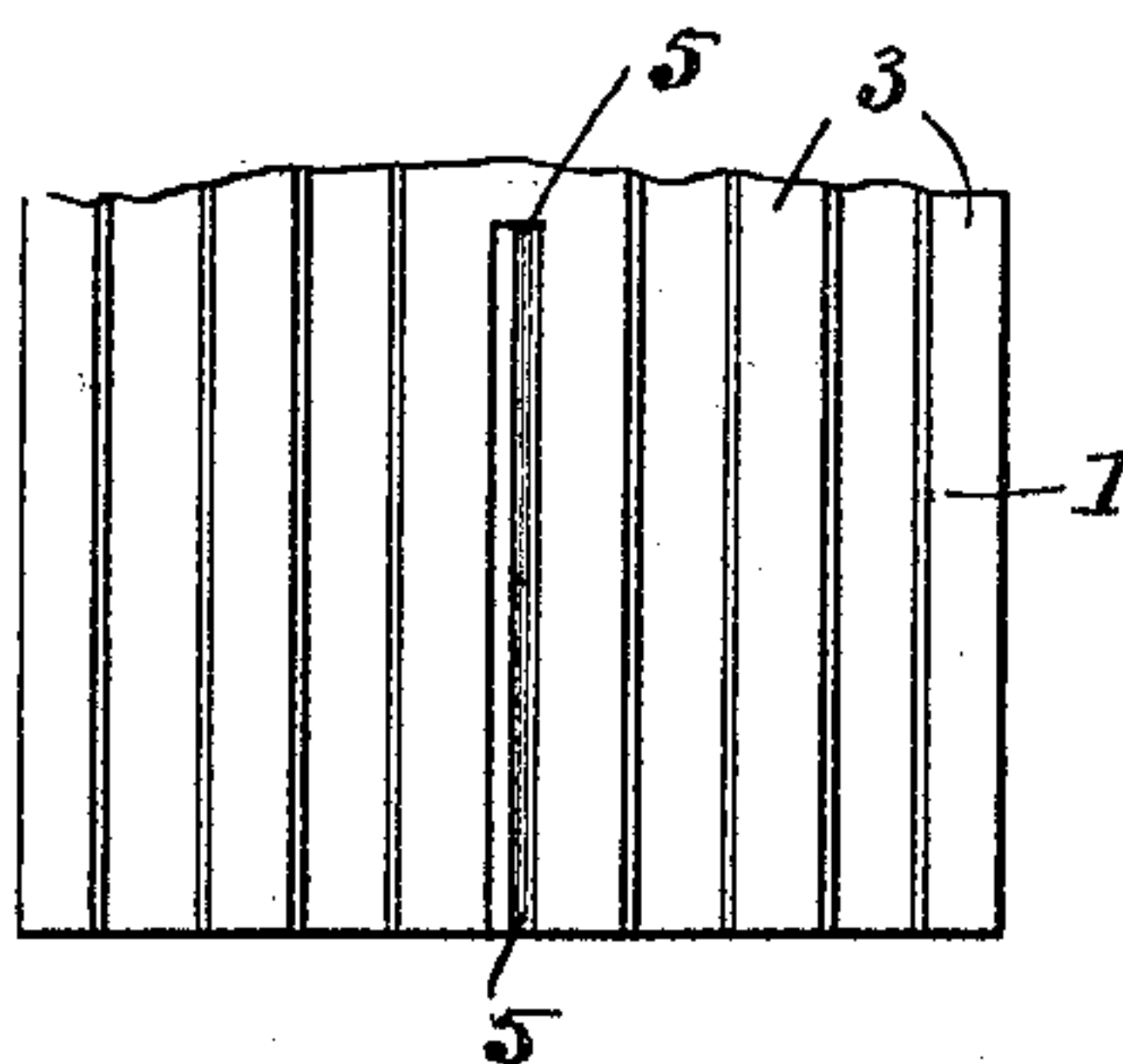


Fig. 4.

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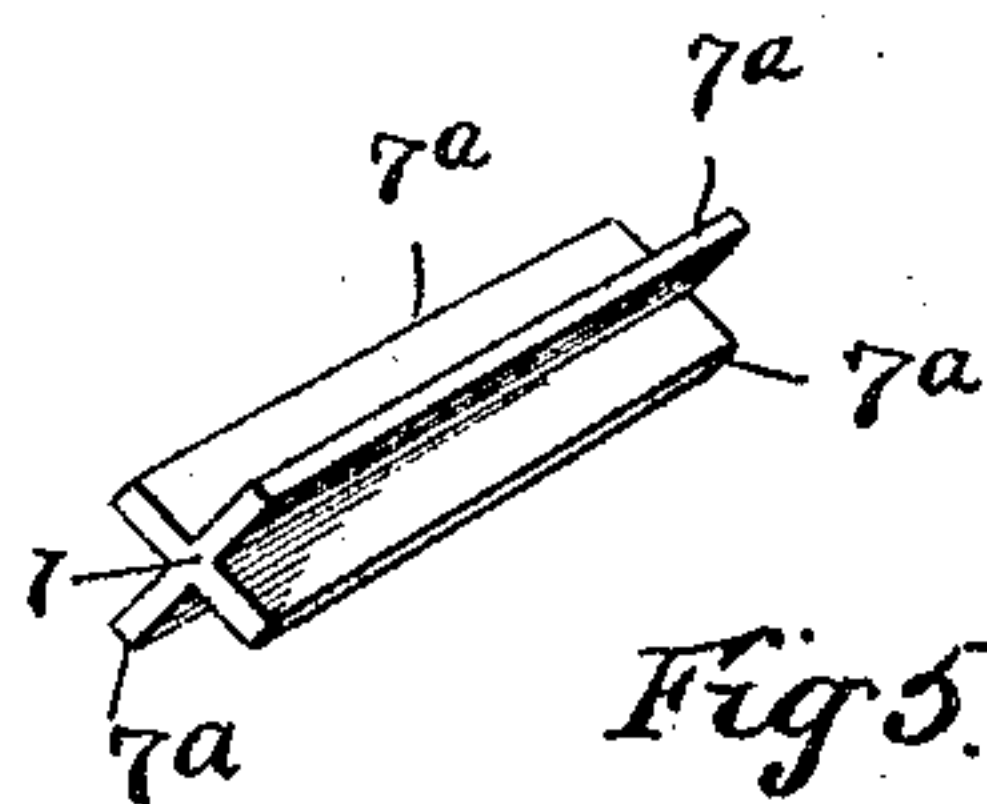


Fig. 5.

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STEREOTYPE PLATE AND BASE CONNECTION.

No. 804,210.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed February 13, 1904. Serial No. 193,474.

To all whom it may concern:

Be it known that we, JOHN W. BUTTERFIELD and BENJAMIN C. SCHMITT, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Stereotype Plate and Base Connections, of which the following is a specification.

Our invention relates to the improvement of stereotype plate and base connections; and the objects of our invention are to provide a simple, reliable, and effective means for locking a stereotype printing-plate to a base and to so construct our improved locking means as to render the same inexpensive and admit of the same being readily applied. These objects we accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a stereotype plate and base having our improved connection. Fig. 2 is a central longitudinal section taken on line $x x$ of Fig. 1. Fig. 3 is a view in elevation, showing the manner of locking a three-column plate on single-column bases. Fig. 4 is an under side view of a stereotype-plate, showing the keyway therein; and Fig. 5 is a detail view in perspective of one of the locking-keys.

Similar numerals refer to similar parts throughout the several views.

1 represents a stereotype printing-plate, that indicated in Fig. 1 of the drawings representing a single-column plate, and 2 represents the base on which said stereotype-plate is adapted to be mounted. The under side of the plate 1 may be provided with the usual longitudinal bearing-ribs 3, which are adapted to bear upon corresponding projections 4 of the base-plate 2. On the under side of the plate 1, preferably at the center of the width thereof and leading inward a desirable distance from each end of the plate, we provide a longitudinal recess or partial keyway 5, the upper portion of which comprises grooves or ways 5^a, which extend at right angles one with the other, as indicated. In the upper surface of the base 2 is formed at each end an inwardly-extending recess 6, which corresponds in form and size with the recess 5 of the plate 1. When the plates 1 and 2 are placed one upon the other in their proper relation, the communicating recesses 5 and 6 serve to form end sockets for the structure, each of which sockets in cross-section has the

form of a cross. Into the sockets thus formed are inserted keys 7, each of these keys having the form of the socket into which it is inserted or comprising a body having four wings or flanges 7^a, projecting from a common center at right angles one with the other. The keys 7 are made to fit snugly within the recesses of the plate and base, and thus firmly unite said parts.

In Fig. 3 of the drawings we have shown the method of uniting an integrally-formed three-column stereotype-plate with three single-column bases. In this case the stereotype printing-plate, which is indicated at 1^a, is made to bear upon the upper sides of three adjoining base-plates and the connection heretofore described of the stereotype-plate and base-plate is made by means of the key 7 between the plate 1^a and the two outer base-plates 2.

Having now fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a stereotype plate and base connection, the combination of an elongated rigid key exhibiting in cross-section the form of a cross, a stereotype-plate and a base each provided, at the portion thereof adapted to contact with the other, with slots corresponding in shape and size with the arms of the key whereby, when the engaging surfaces are in contact and the key inserted within the slots, the stereotype-plate and base will be securely locked together.

2. A base for stereotype-plates having formed within the upper surface thereof two furrows with parallel sides, said furrows forming an angle with each other and converging at the surface.

3. A stereotype-plate having formed within its upper side and longitudinal therewith two furrows, which together exhibit in cross-section the form of an L with arms equal in length and disposed at right angles to each other and forming equal angles with the under side of the plate.

4. In a device of the character described, the combination of a stereotype-plate and a base therefor, each having formed within the surface adapted to contact with the other, two furrows with parallel sides, said furrows forming an angle with each other and converging at the surface, and an elongated rigid key of similar conformation throughout its length exhibiting in cross-section the form of a cross with arms of equal length.

5. In a device of the character described, the combination of a stereotype-plate and a base therefor, each having formed within the surface adapted to contact with the other, two
5 furrows with parallel sides, said furrows being disposed at right angles to each other and each being in alinement with a corresponding furrow in the opposite contacting surface and an elongated rigid key of similar conforma-
10 tion throughout its length and conforming in cross-section to the furrows in the two surfaces when the same are in contact.

6. In a stereotype plate and base connection, the combination with a stereotype-plate
15 formed at its end and on its under side with a longitudinal recess comprising kerfs or arms

extending at right angles to each other, a base-plate having its upper surface at its end formed with a recess corresponding with the recess in the under side of the stereotype-plate, of a
20 locking-key comprising a body composed of a plurality of longitudinally-arranged wings or flanges projecting from a common center, said key being adapted to be inserted within and to fit the socket formed by the opposing re-
25 cesses of the plate and base when the same are made to bear one upon the other.

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In presence of—

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A. L. PHELPS.