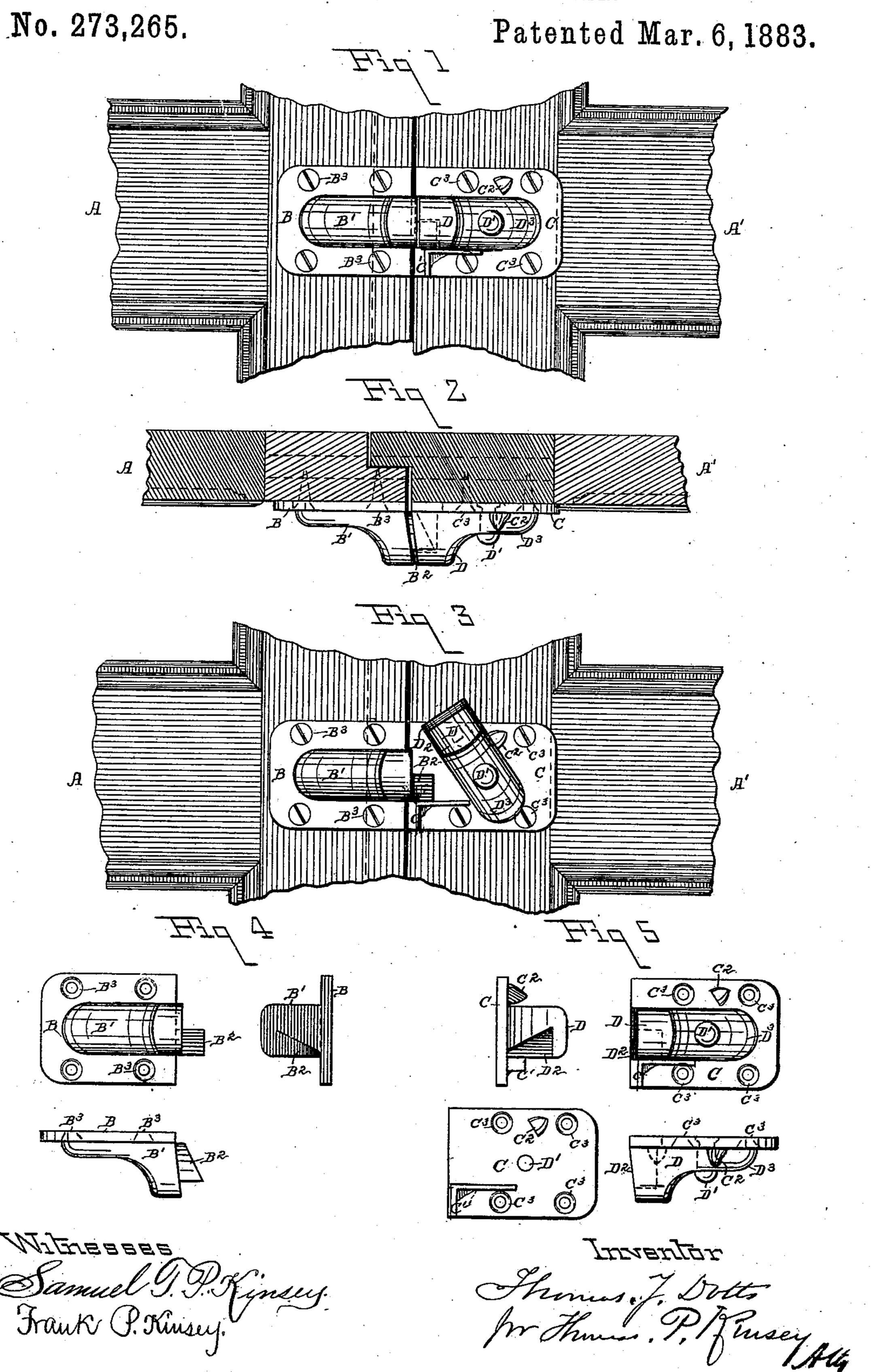
T. J. DOTTS.

AUTOMATIC SHUTTER FASTENER.



United States Patent Office.

THOMAS J. DOTTS, OF READING, PENNSYLVANIA.

AUTOMATIC SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 273,265, dated March 6, 1883.

Application filed October 6, 1882. (Model.)

To all whom it may concern:

Be it known that I, Thomas J. Dotts, a citizen of the United States, residing at the city of Reading, county of Berks, State of 5 Pennsylvania, have invented a new and useful Improvement in Automatic Shutter-Fasteners, of which the following is a specification.

This invention relates to that class of shutter-fastenings wherein the act of closing the ro shutter locks the same.

The object of the invention is to furnish a cheap and reliable shutter fastening or lock, not liable to derangement, and which may be operated by a child, yet in every respect as 15 secure as the ordinary shutter-bolt.

Referring to the drawings forming part of this specification, in which similar letters refer to similar parts, Figure 1 represents the automatic fasteners secured upon the shutter-20 flaps and viewed from the interior of the building. Fig. 2 represents a section through the shutters and a side elevation of the device. Fig. 3 represents the disengagement of the pawl, thereby releasing the lock of the shutters 25 that they may be opened; Fig. 4, a front, side, and end elevation of the latch-keeper and plate; Fig. 5, a front, side, and end elevation of the pawl or latch and its plate, in all of which-

A A' represent the shutter flaps or leaves, 30 of the usual construction; B, the keeper-plate, having an abutment, B', raised thereon, the outer face of which projects outward or away from the keeper-plate at an angle of about ten degrees, and has attached to its face, and form-35 ing an integral portion thereof, an inclined portion or keeper, B², the plate being provided with countersunk holes B³ for attachment to the shutter.

C represents the fulcrum-plate of the pawl 40 or latch D. The latter is of a form similar to the abutment B', and is provided with a fulcrum and pin D', has its front face at a reverse angle of ten degrees to the abutment, so that when the shutters are closed the face of the 45 abutment and pawl or latch shall lie in parallel lines. Its front face is further provided at D² with a sunken inclined surface corresponding with the projected plane upon the face of the abutment, and of depth sufficient 50 to clear the same. The pawl projects to the rear of the fulcrum, forming a tail, D3, as a l

purchase to raise the head of the same. The fulcrum-plate is provided with the usual screwholes, C³, and with stop C', limiting the drop of the pawl, and stop C², limiting the rise of 55 the same.

The construction is quite simple, requiring very little fitting, and may be furnished at a

moderate price.

The operation of the device is as follows: 60 In the drawings the keeper-plate is shown attached to the shutter A, having the rabbet upon the inside, and the fulcrum-plate upon A', having the rabbet upon the opposite side. This is immaterial, as the device is applicable 65 to shutters made plain upon their meeting edge, mounted upon the shutters, as shown. The act of closing the same drives the pawl or latch D up the incline B², and when the shutters come in line with each other the recessed 70 portion D² of the pawl drops over the projected plane B², or keeper, and the shutters are securely locked or fastened together. As the keeper B² is flush with the lower edge of the abutment B', the pawl cannot be lifted by the 75 insertion of a wire or blade between the shutter-joint B², preventing the operation of the same.

With the ordinary shutter bolt or fastener it frequently occurs in the experience of every 80 householder that in closing the shutters from the outside one or more of the same will be left unlocked, supposing that they were secured. With my arrangement this cannot occur. Whether they be closed from the exterior or 85 interior of the building, the moment the shutters line with each other they are automatically locked.

The object in angling the faces of the abutment and pawl is to give freedom to the move- oc ment of the pawl, and to prevent shutters rattling in high winds, the projected ends of the abutment and pawl contracting on a very slight movement of the shutter.

To open the shutters it is only necessary to 95 press down upon the tail D3 of the pawl, when the head D^2 will rise above the keeper B^2 and release the lock for that purpose. Stops C' and C² prevent the raising or lowering of the pawl above or below its best points of opera- 100 tion, and the head D² having just sufficient excess of weight beyond that of the tail D^3 to

insure its fall at the proper time, it follows that the effort of a very small child will release the pawl from the keeper and permit the opening of the shutters.

Having described my invention, its advantages, and construction, I desire to secure by Letters Patent the following claims thereon:

1. An automatic shutter-fastener composed of the following elements: a keeper-plate, B, provided with an angular-faced abutment, B', and projected therefrom a keeper, B², a fulcrum-plate, C, provided with stops C' C², and mounted thereon a pawl or latch, D, fulcrumed at D', having a recessed head, D², correspond-

ing in form with the keeper B², and a tail, D³, 15 substantially as shown, described, and for the purpose set forth.

2. In an automatic shutter-fastener, as described, the combination of a keeper-plate, B, and its abutment B', and projected inclined 20 keeper B², with the shutter A and pawl D on plate C, substantially as and for the purpose specified.

THOS. J. DOTTS.

Witnesses:

SAMUEL T. P. KINSEY, THOMAS P. KINSEY.