

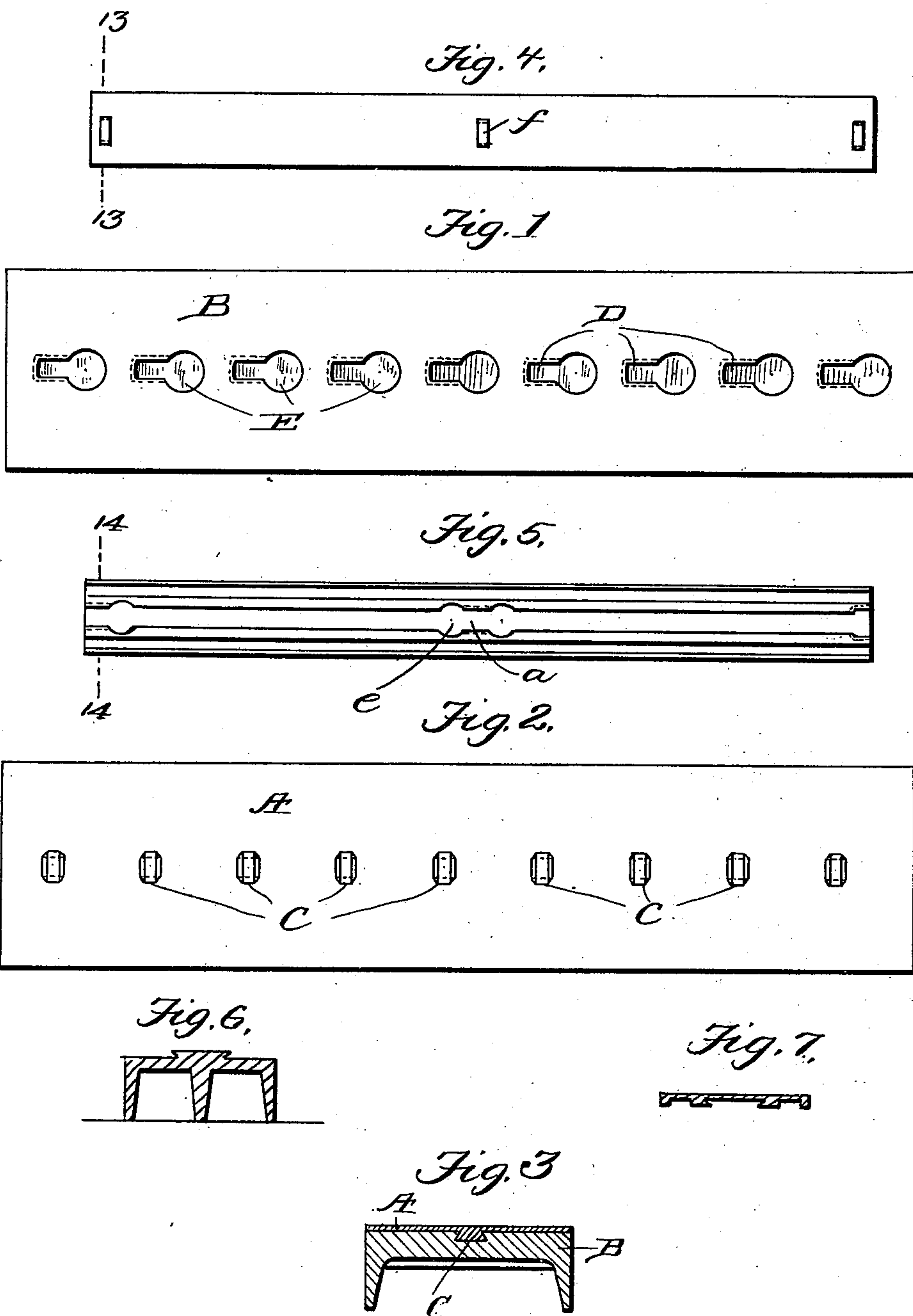
No. 666,558.

Patented Jan. 22, 1901.

D. REID.  
PLATE HOLDER.

(Application filed May 11, 1899.)

(No Model.)



Witnesses  
Bruce S. Elliott  
J. B. Keifer

Inventor  
David Reid  
By James L. Norris  
Attorney

# UNITED STATES PATENT OFFICE.

DAVID REID, OF MIDDLE BRIGHTON, VICTORIA.

## PLATE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 666,558, dated January 22, 1901.

Application filed May 11, 1899. Serial No. 716,435. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID REID, publisher, a subject of the Queen of Great Britain, residing at "Loloma," Black street, Middle Brighton, near Melbourne, in the British Colony of Victoria, have invented Improvements in Plate-Holders, (for which I applied for a patent in Victoria on the 14th day of December, 1898, numbered 15,788,) of which the following is a specification.

This invention has been devised for the purpose of providing more convenient means for connecting or locking printing-plates to their bases and at the same time enabling the weight of such plates to be reduced to a minimum. Hitherto this object has been accomplished mainly by means of two continuous keys on the back of the printing-plate, both inclining in the one direction and fitted into corresponding recesses on the face of the base. Another system of connecting these two parts together entails the use of screws projecting from the under side of the printing-plates and fitting into keyways or undercut recesses in the base. There are, however, objections to both of these systems. The first requires the printing-plate to be held in position by side pressure, and in the event of thin plates being used there is the danger of the plate jumping out of engagement with the grooves. The second arrangement mentioned above is objectionable, because the screws are liable to work loose in the plate, owing to the continuous vibration of the printing-press, while to provide sufficient hold for the screws the plates have to be made much thicker than where my invention is used.

In order that my improvements in printing-plates and their bases may be clearly understood, I will describe same by reference to the accompanying drawings, in which—

Figure 1 is a plan of the base for mounting a "half-column" printing-plate. Fig. 2 is a similar view of the under side of the plate, and Fig. 3 is a vertical transverse section across the printing-plate and base after the former has been fitted in position upon the latter. Fig. 4 is a plan of the upper side of the base, showing a modified arrangement of projections or cleats. Fig. 5 is a top plan view of the plate, showing a modified form of undercut slots extending from end to end of

the same. Figs. 6 and 7 are transverse sections taken on the lines 13 13 and 14 14 of the base and plate, respectively.

The same letters of reference indicate the same parts in all the figures.

A represents a thin printing-plate, B the base upon which it is mounted, and C C wedge-shaped projections or cleats which are cast upon the under side of the plate A and which are constructed to engage with the correspondingly-cut grooves or slots D in the base B.

E E represent annular recesses which are formed at intervals in the base B to enable the projections C to be dropped into said recesses and slid longitudinally into engagement with the oblong recesses D, having the side walls thereof formed at an inclination or of the same contour as the sides of the projections or cleats C, so that the latter will fit neatly and be retained within the recess D. Consequently the printing-plate will be held securely upon the base without requiring extra aid and without being liable to shake loose while the printing is proceeding.

The recesses D, with their inclined side walls, may be constructed to extend from end to end of the plate, as shown in Fig. 5, wherein *d* indicates the annular recesses, and *e* the undercut slots, and the number of projections or cleats upon the base may be decreased, as shown in Fig. 4, as at *f*. This construction is possibly cheaper, because the machine used for forming the slots can take one cut from end to end; but the construction illustrated, in which the cut slots D only extend a short distance from the recess E, will be found equally satisfactory in operation.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination of a thin printing-plate provided on its lower face with a series of integral wedge-shaped projections or cleats, and a base having formed therein a series of annular recesses each terminating in an oblong recess having its side walls formed at an inclination and which are adapted to receive the said projections or cleats for securing the plate to the base.

2. The combination with a base having



formed therein a series of annular recesses each terminating in an oblong recess having its side walls formed at an inclination, of a series of wedge-shaped projections or cleats  
5 formed integral with a printing-plate and adapted to be secured within the said oblong recesses for retaining the plate to said base.

3. The combination of a printing-plate provided on its lower face with a series of integral wedge-shaped projections or cleats and  
10 a base having formed therein a series of annular recesses each terminating in a recess having its side walls formed at an inclination and which are adapted to receive said projec-

tions or cleats for securing the plate to the  
base. 15

4. The combination of a printing-plate and base therefor, one of which is provided with a series of integral wedge-shaped projections, and the other formed with a series of annu- 20 lar recesses each terminating in a recess having its side walls formed at an inclination and which are adapted to receive said projections for securing said plate to the base.

DAVID REID.

Witnesses:

EDWARD WATERS,

EDWARD WATERS, Junr.