

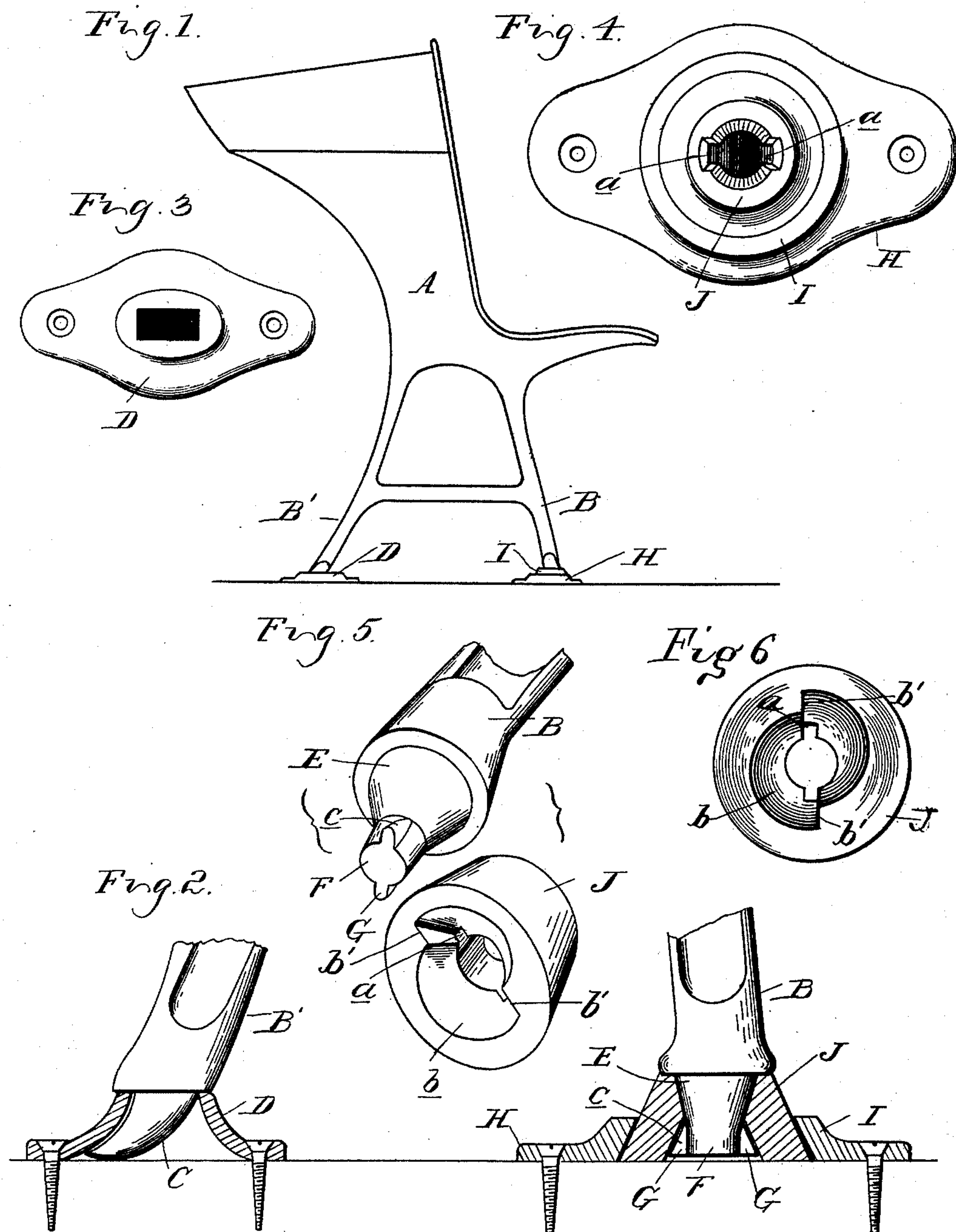
(No Model.)

F. E. GOODNOW.

DEVICE FOR DETACHABLY SECURING DESKS, SEATS, &c., TO FLOORS.

No. 483,841.

Patented Oct. 4, 1892.



Witnesses  
A. L. Hobbie  
H. B. O'Gheerty

Inventor  
Frank E. Goodnow  
By M<sup>rs</sup> Sprague  
Attys.



# UNITED STATES PATENT OFFICE.

FRANK E. GOODNOW, OF NORTHVILLE, MICHIGAN.

DEVICE FOR DETACHABLY SECURING DESKS, SEATS, &c., TO FLOORS.

SPECIFICATION forming part of Letters Patent No. 483,841, dated October 4, 1892.

Application filed January 21, 1892. Serial No. 418,761. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. GOODNOW, a citizen of the United States, residing at Northville, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Devices for Detachably Securing Desks, Seats, &c., to Floors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in a device for detachably securing desks, seats, &c., to floors; and the invention consists in the peculiar manner of detachably securing said furniture to the floor, whereby it may be readily placed in position or removed; and to this end the invention consists in the peculiar construction of the legs or base of the furniture suitably formed to engage in floor-plates which are adapted to be permanently secured to the floor, all as more fully hereinafter described.

In the drawings, Figure 1 is a side elevation of a school seat and desk embodying my invention; Fig. 2, a partial section of the legs or standards at one side or end of a table, desk, or other article of furniture provided with the device for securing the same to the floor. Fig. 3 is a plan view of the rear plate. Fig. 4 is a plan view of the front floor-plate. Fig. 5 is a detached perspective view of the fastening devices for the front leg of the desk. Fig. 6 is a bottom plan view of the collar.

While I have shown my device as applied to a school-desk, it is equally as well adapted to any other stationary furniture, such as church-pews, chairs for opera-houses, &c., and while I have referred arbitrarily to the front and rear legs as for specific devices applied to them it is evident that the fastening devices may be reversed from the positions in which I have shown them.

A is the side frame of a school-desk of ordinary construction, having the legs B B', respectively, which I will call the "front" and "rear" legs of the desk. The rear leg is provided with a curved horn C, (plainly shown in Fig. 2,) which is adapted to enter and fit a bearing formed in the floor-plate D, permanently secured to the floor. The front leg B

is provided at its lower end with a tapering extension E, which terminates in a pin F, provided on opposite sides with the tapering fins or wings G.

H is a floor-plate for locking the front leg in position. This plate is provided with a conical bearing I, in which is secured the rotating collar J. This collar is shown plainly in Fig. 5 and is provided with slots *a*, corresponding to the wings G on the leg B, and with locking-cams *b*, extending in opposite directions from said slots. The cams *b* are tapered and terminate in shoulders *b'*, the tapering feature of the cam binding the wings tightly in place, while the shoulders *b'* act as stops for the wings when the movement of the sleeve is reversed, the shoulders being located at a point adjacent to the slot *a*. The parts being thus constructed and the floor-plates secured in proper relation to each other upon the floor to secure a piece of furniture therein, I tilt the article of furniture rearwardly, engaging the horns C in the floor-plates D, and then lock it therein by turning it to its normal position, first turning the collar J so that the wings G upon the front leg will engage in the slot *a*. When so engaged, the front leg is locked in position by turning the collar J, the cams *b*, bearing against the inclined faces *c* upon the wings G, tightly locking the front leg in position upon the floor.

To remove the article of furniture, the operator has simply to turn the collar J until the slot *a* can register with the wings G, when by tipping the article of furniture the front and rear legs may be disengaged from the floor-plates in the reverse manner to that employed in locking the leg, as above set forth.

What I claim as my invention is—

1. In a device for securing furniture to floors, the combination, with the rear legs of the furniture, of curved horns on the legs, fixed slotted plates with which the horns engage, extensions on the forward legs, formed with lateral wings, fixed plates below the extensions, having central conical apertures, and conical collars loosely fitted in the apertures, formed with radial grooves and inclined planes on their under faces, substantially as described.

2. In a device for securing furniture to  
floors, the combination, with the legs of the  
furniture, of extensions on the legs having  
lateral wings on opposite sides, plates on the  
5 floor, formed with conical openings, and conical  
collars loosely fitted in the openings of  
the plates, formed with the radial grooves at  
opposite sides, through which the wings pass,

and oppositely-inclined planes on their under  
faces, substantially as described. 10

In testimony whereof I affix my signature in  
presence of two witnesses.

FRANK E. GOODNOW.

Witnesses:

M. B. O'DOHERTY,  
N. L. LINDOP.