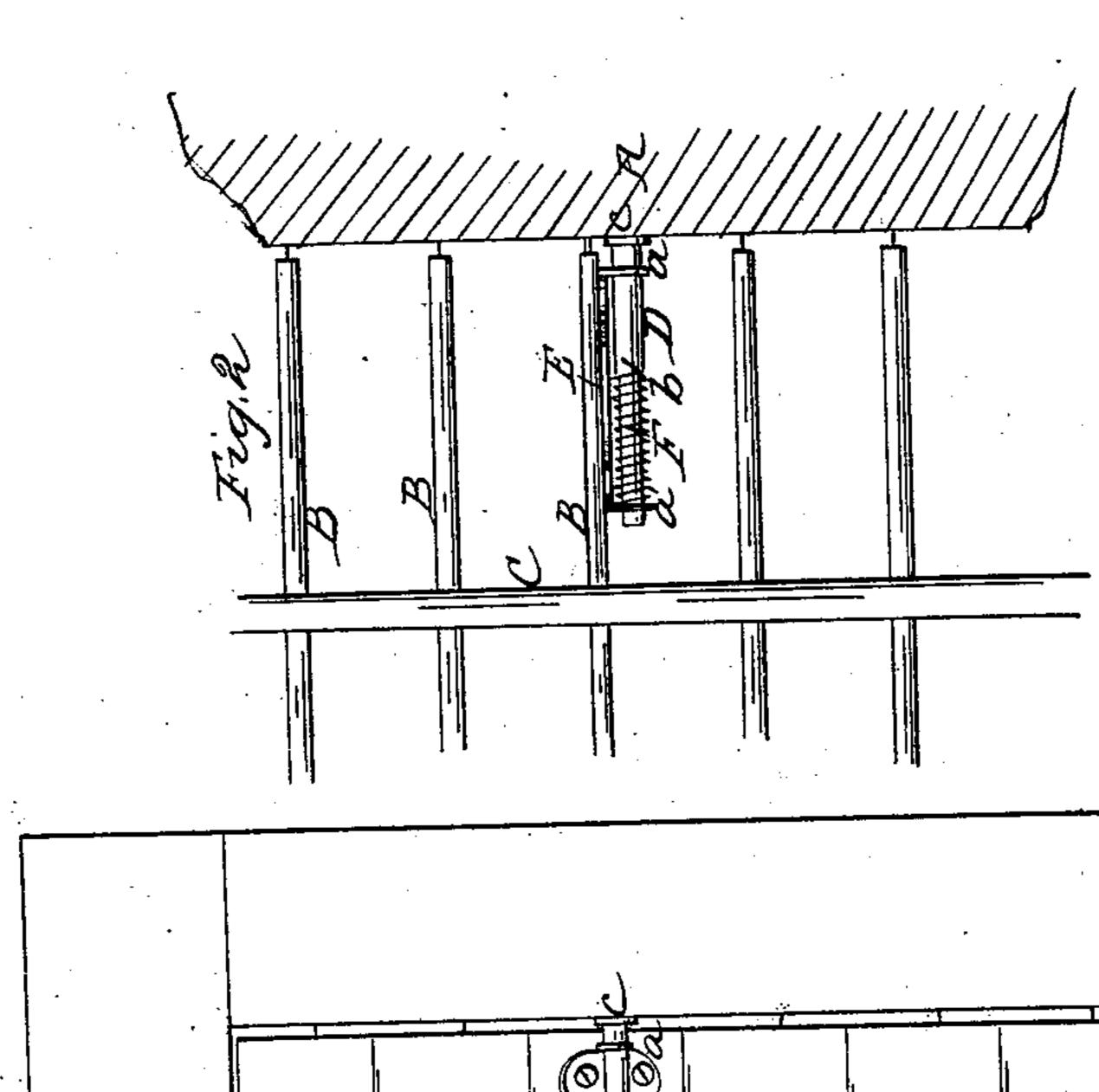
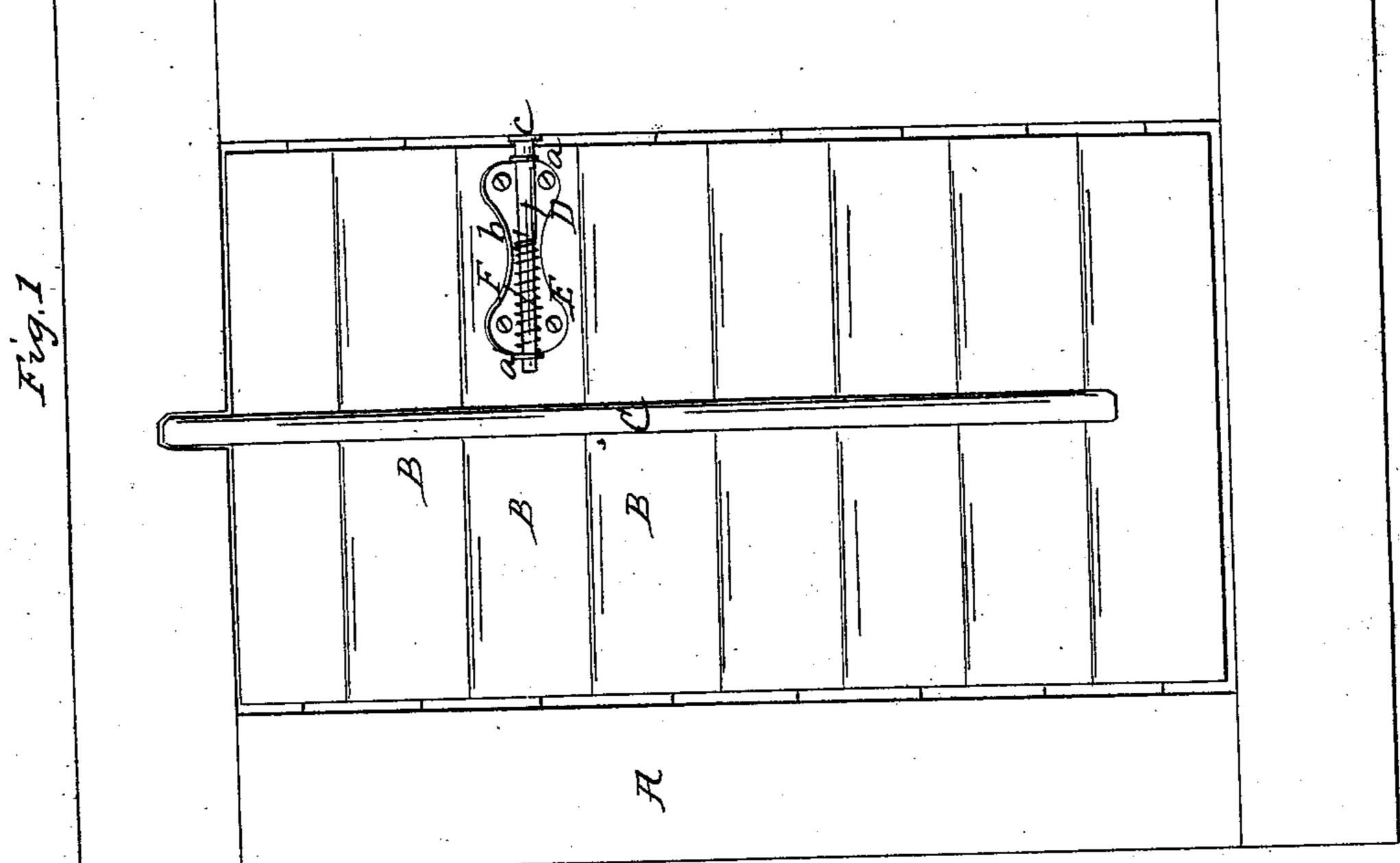
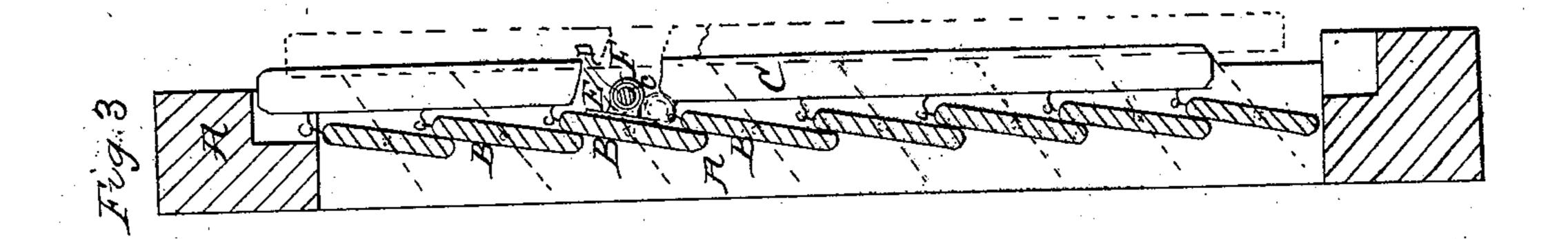
A. A. Starr,

Blind Ston.

Patented June 26, 1855.







UNITED STATES PATENT OFFICE.

ALFRED A. STARR, OF NEW YORK, N. Y.

ADJUSTER OF WINDOW-BLINDS.

Specification of Letters Patent No. 13,140, dated June 26, 1855.

To all whom it may concern:

Be it known that I, Alfred A. Starr, of the city, county, and State of New York, have invented a new and useful Shutter or 5 Blind Slat Adjuster; and I do hereby declare that the following is a full, clear, and exact description of the same, reference beforming part of this specification, in 10 which—

Figure 1, is a front elevation of a shutter or blind with my improvement applied to it, the slats being closed. Fig. 2, is a front view of a portion of the same the slats be-15 ing open. Fig. 3, is a vertical transverse section of Fig. 1.

Similar letters of reference in each of the several figures indicate corresponding

parts.

This invention relates to the adjusting of the slats of window blinds or shutters, and is designed to render them capable of being adjusted with ease and facility to any angle and held permanently after being ad-25 justed as desired.

The nature of said invention consists in one of the slats of the shutter or blind in such a manner that it shall turn with the 30 slat and allow of the slat being adjusted to any angle and at the same time bear with considerable force against the inside edge of the side strip of the frame of the shutter or blind and owing to thus bearing against 35 the side strip of the frame when the slat has been once set, retain it and also all the others which are connected to it by the ad-

at which it is desired to have them stand. To enable others to fully understand my invention and make and use the same I will proceed to describe it minutely.

justing rod in the position or at the angle

A, represents the frame of the blind or

shutter. B, B, are the slats arranged in 45 the same in the usual manner, being ca pable of turning and connected together by an adjusting rod C, as shown in Fig. 3.

D, is the friction bolt. It is arranged to move in bearings a, a', on the plate E, 50 which is attached fast to the front of one of the slats as shown in Fig. 2. The bolt D, has a shoulder b, formed on it for one end of a spiral spring F, to bear, the other end of said spring bearing against the rear 55 bearing a', on the plate E, as shown. There

is also a flat friction plate c, formed on the front end of the bolt, so that the bolt may bear against a larger surface and thus have a firmer hold, and be capable, by the aid of the spiral spring F, which bears against 60 its shoulder and thereby keeps it in close and rigid contact with the inside edge of ing had to the accompanying drawings, the side strip of the frame, of retaining the slat to which it is attached and those connected to said slat by the adjusting strip, 65 at the angle at which it may be desired to have them stand.

> The bolt D, exerts friction upon the side strip always, and consequently if the slats be wide open as in Fig. 2, or closed as shown 70 in black in Figs. 1 and 3, or partly open as shown in red in Fig. 3, or in any position, it will be capable of retaining them permanently so long as desirable.

> As the belt is self adjusting by the aid 75 of the spring, and also capable of yielding when necessary no inconvenience will be experienced in case of shrinkage or expansion of the slats, it accommodating itself as is necessary in either case.

The utility of this adjuster over other the application of a spring friction bolt to | methods of adjusting slats consists in its rendering the slats capable of being adjusted to and held at any angle, also in its simplicity and cheapness, and likewise in 85 its ready application to old blinds in use without the necessity of cutting away or defacing their appearance in the least.

Having the slats capable of being adjusted and then held permanently at any 90 angle has long been aimed at but has never to my knowledge been accomplished in so perfect and cheap a way as herein described and shown.

What I claim as my invention and desire 95 to secure by Letters Patent is—

The application of the spring friction bolt to one of the slats of the shutter or blind in such a manner that it shall turn with the slat and allow of the slat being adjusted 100 to any angle and at the same time bear with considerable force against the inside edge of the side strip of the frame of the shutter or blind, substantially as and for the purposes set forth.

ALFRED A. STARR.

Witnesses: Jos. Geo. Mason, WM. Tusch.