

(No Model.)

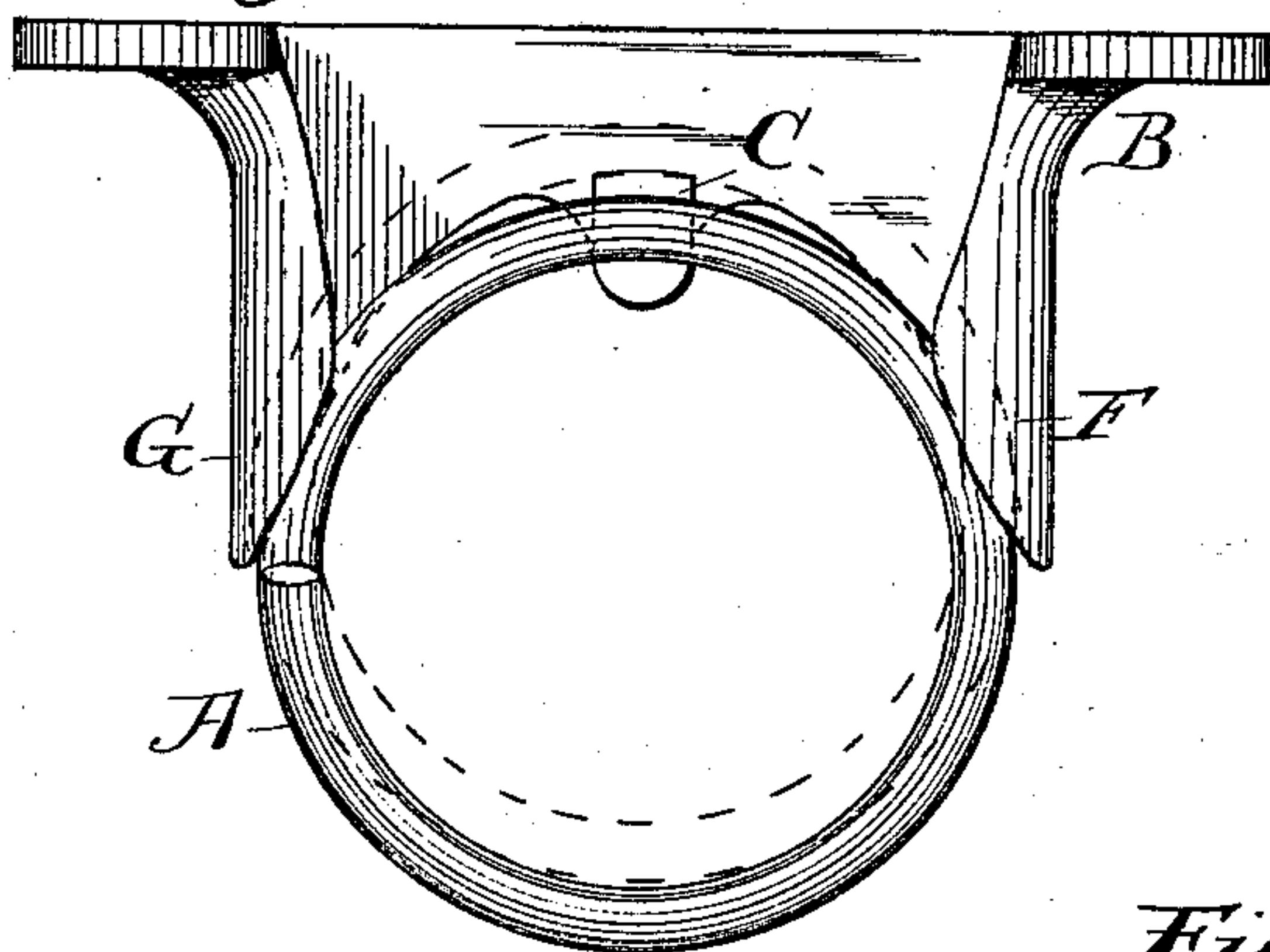
W. I. BUNKER.

ATTACHMENT FOR ROCKING CHAIRS.

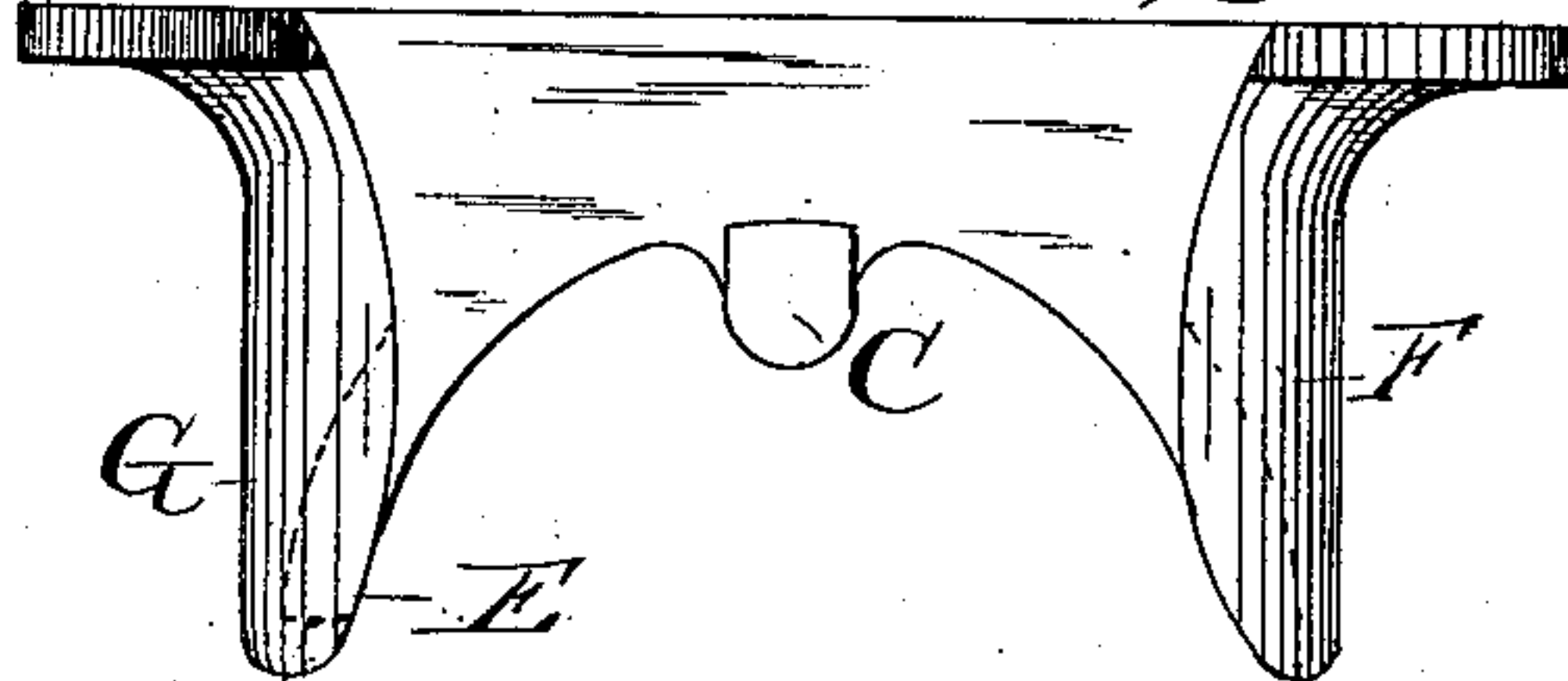
No. 334,345.

Patented Jan. 12, 1886.

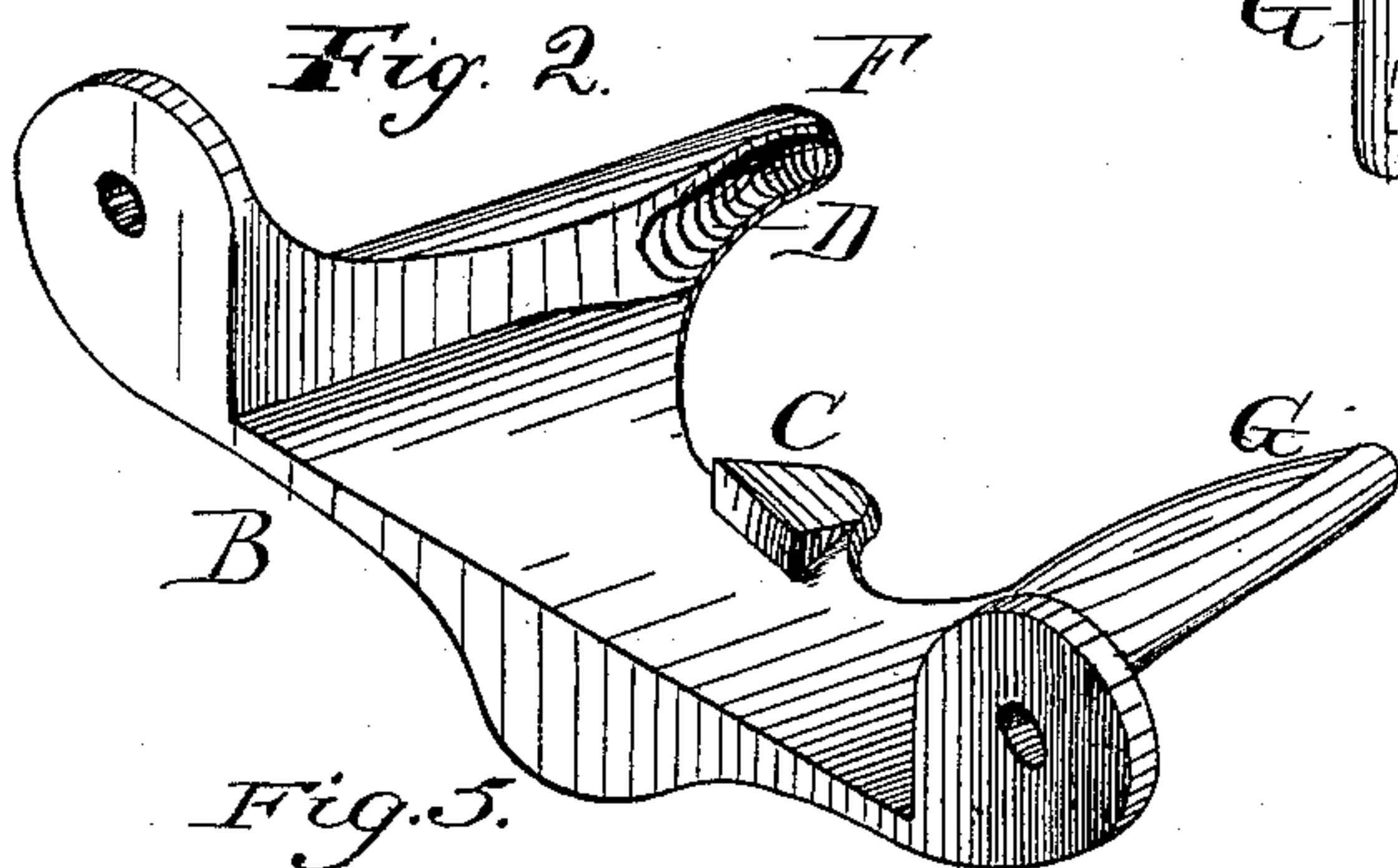
*Fig. 1.*



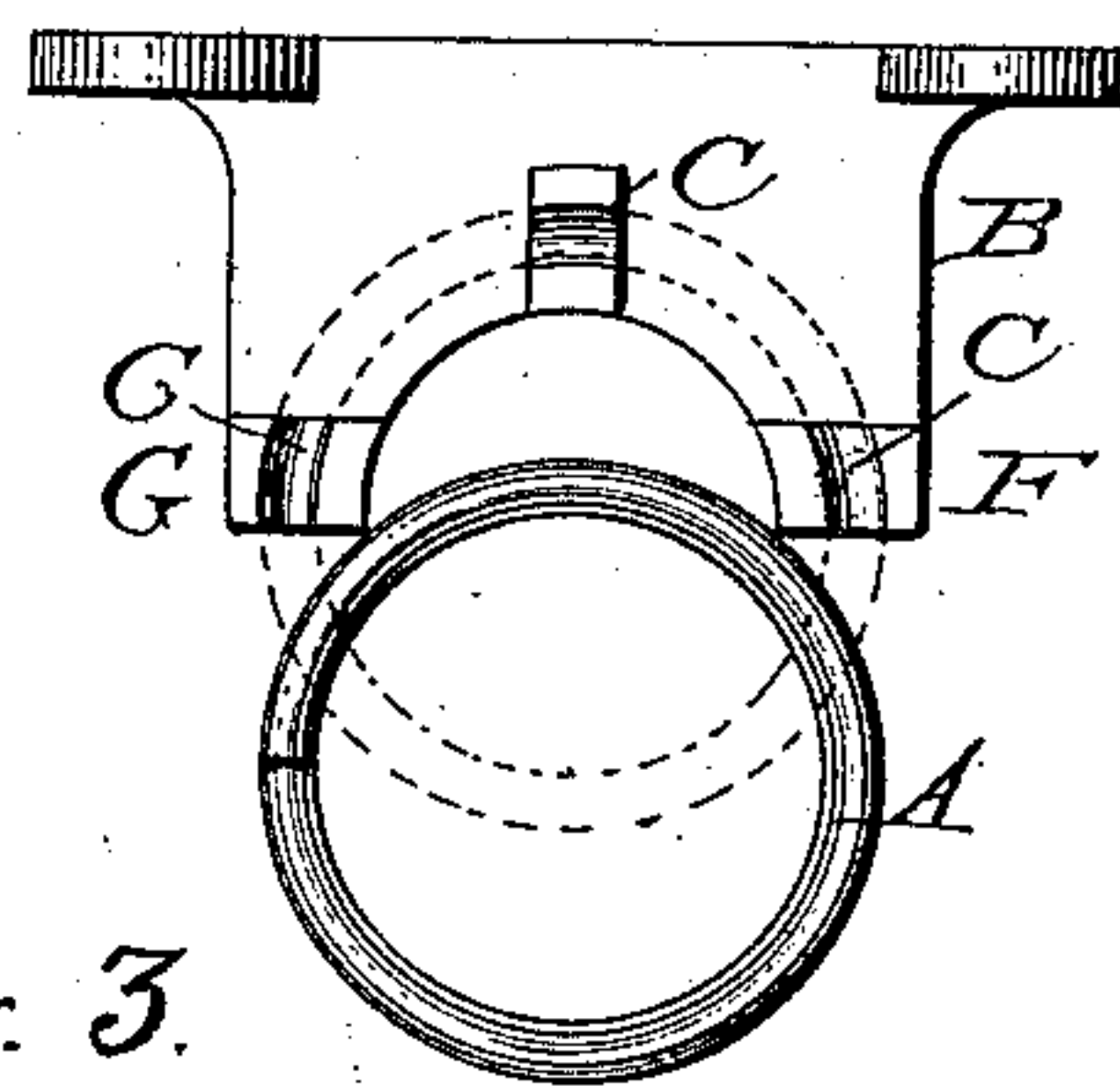
*Fig. 4.*



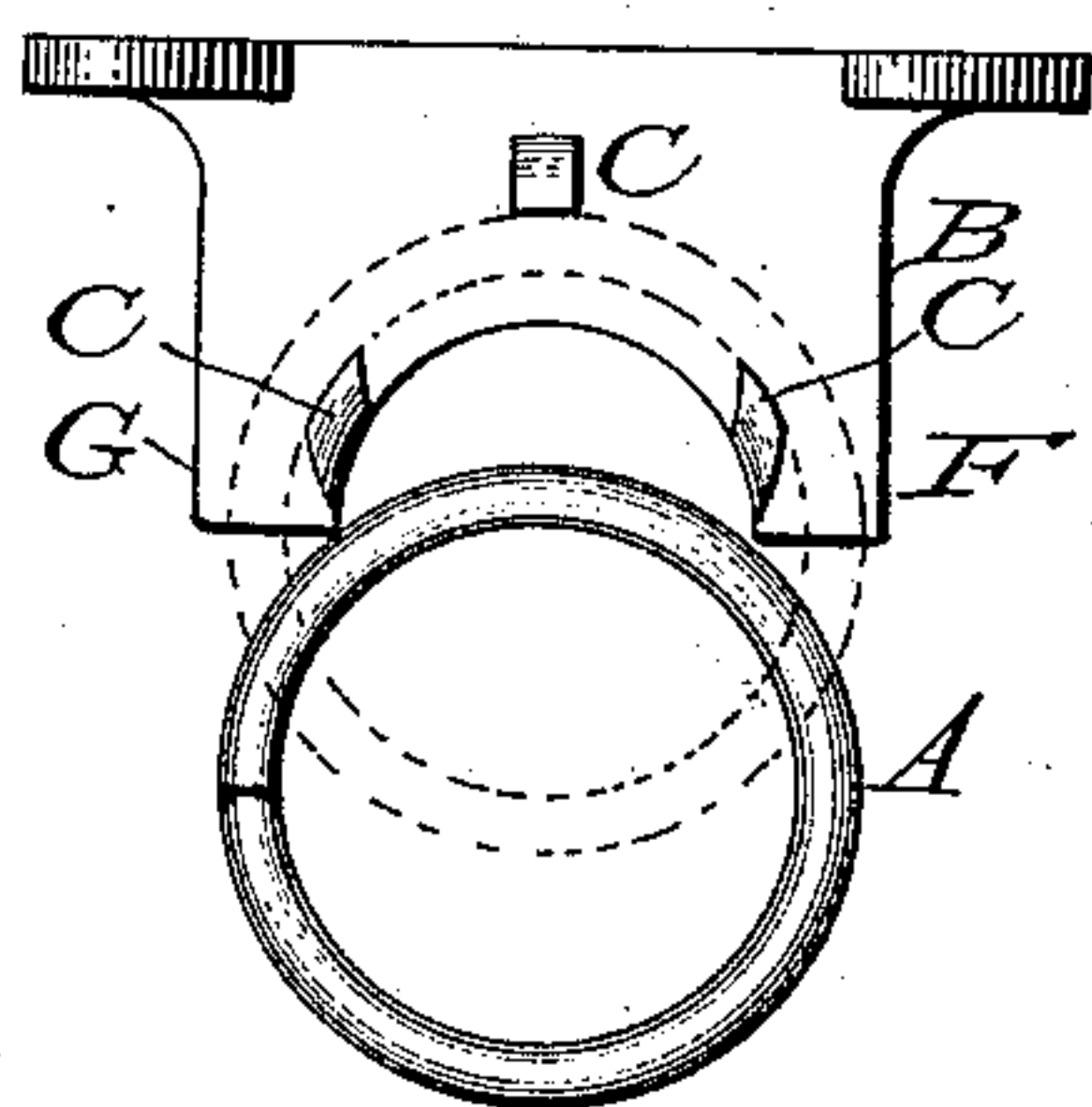
*Fig. 2.*



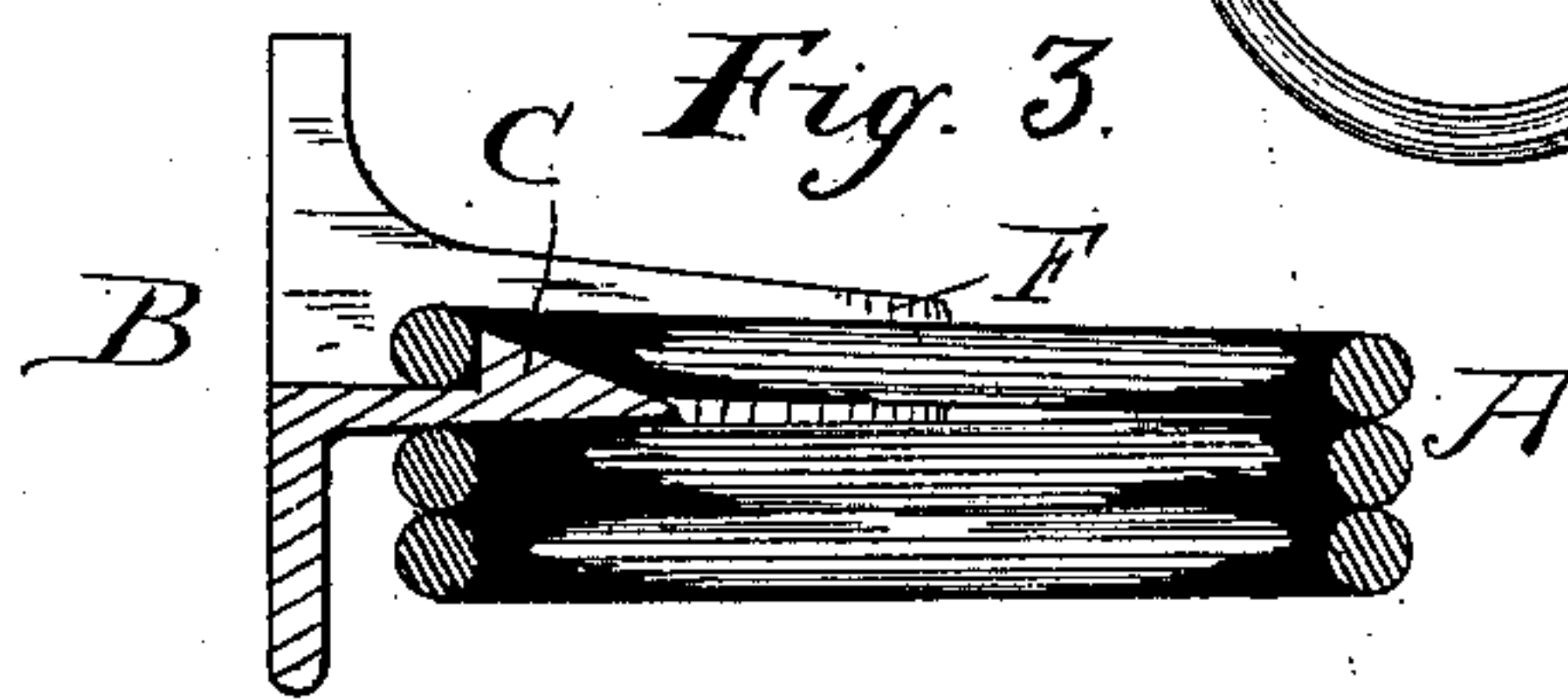
*Fig. 6.*



*Fig. 5.*



*Fig. 3.*



Witnesses:

Taylor E. Brown -  
Lew. G. Curtis.

Inventor:

William I. Bunker

By Banning Banning.

his Attorneys:



# UNITED STATES PATENT OFFICE.

WILLIAM I. BUNKER, OF CHICAGO, ILLINOIS.

## ATTACHMENT FOR ROCKING-CHAIRS.

SPECIFICATION forming part of Letters Patent No. 334,345, dated January 12, 1886.

Application filed November 3, 1884. Serial No. 147,067. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM I. BUNKER, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Attachments for Rocking-Chairs, of which the following is a specification.

The object of my invention is to make an attachment for rocking-chair springs that will hold the ends of the spring rigidly when in place, and at the same time enable the spring to be removed and the chair shipped in separate pieces without disturbing or removing the brackets from their position on the rockers or base-rails; and it consists in the features of construction and arrangement hereinafter described.

In the drawings, Figure 1 shows the bracket containing my improvements with the spring partially in place. Fig. 2 shows a bracket detached from the spring. Fig. 3 shows a transverse vertical section of the bracket and spring. Fig. 4 shows a detached bracket in a slightly modified form, and Figs. 5 and 6 show modifications in which the end coils of the spring pass over shoulders on the side projections of the bracket and press against its middle shoulder.

A represents the spring; B, the bracket; C, the retaining piece or pieces on the bracket; D, a shoulder or stop formed in the bracket; E, a shoulder or stop against which the end of the coiled wire rests, and F and G projections which partly embrace or inclose the end coils of the spring.

In constructing my improved bracket I cast the same with projections F and G at the sides to partly embrace and inclose the upper and lower coils of the spring, as shown in Fig. 1. These projections are made, preferably, with a slight hollow or cavity, in which the coil of the spring lies when in place, as shown at D in Fig. 2. These projections are wider apart at their ends than farther back, so as to present a shoulder for the coil of the spring to rest against when in place, and prevent its being pushed farther back than necessary. One of these projections may be inclosed at its end, as represented by E in Fig. 4, so as to prevent the coil of the spring from being pushed or wound farther around than neces-

sary. Where this stop E is used, the end of the coil should be inserted at this side first and rest against the stop, after which the coil of the spring may be inserted in place, as in other cases where this stop is not used, as hereinafter described.

Between the projections on the brackets above described I make a third projection, C, preferably, but not necessarily, wedge-shaped, which may be forced between the coils of the spring, and which at its rear edge presents a shoulder, as shown in Figs. 2 and 3. This projection C holds the spring firmly and rigidly in its place, so that when the spring is inserted for use in a chair it cannot be removed without prying the coils apart.

In operation I take my brackets and fasten them by screws or otherwise upon the rockers and base-rails of a platform rocking-chair. I take the coiled springs and place them in proper position between the projections on the bracket and against the edge of the projection C. I then push the springs into their place, projection C opening the coils until it has passed entirely through, after which the end coils of the spring fall into their proper place, as shown in Fig. 3. To remove the spring, so as to ship the chair in separate pieces, I take any convenient tool presenting an edge or point—as, for instance, a screw-driver—and insert it under the end coils and pry them sufficiently up or down to slip them over the projection C. In this way the chair can be shipped in separate parts without detaching the brackets, and afterward put together, ready for use, with the greatest ease and expedition.

In Figs. 5 and 6 I have illustrated modified forms of the bracket, in which each end coil of the spring passes over or behind shoulders on the side projections and presses or abuts against a middle shoulder, so that when the spring is in place the shoulders of the side projections are on the inside and the shoulder of the middle projection on the outside of its end coil, and other similar modifications will readily suggest themselves. It will be noticed that in all these forms of brackets an essential idea is the retention of the springs in place by forcing their end coils over a projection or projections, so that they fall into place from



the elasticity of the spring, and cannot be removed along the course of their insertion without prying or lifting them up. The importance of being able to remove the springs by prying open their end coils is that they may be removed from the brackets when in place on the chair, while if they could only be inserted or removed by screwing them into place any attempt to remove them would have the effect of screwing them tighter onto the upper or lower bracket as they were turned to the right or to the left, thus while unscrewing them from the top bracket the operation would be screwing them onto the lower bracket.

The projections over which the spring is forced may be made in various shapes, a number of which I have illustrated in the drawings; but the essential idea or feature of my invention does not consist so much in the form of the projections as in securing the springs in place by forcing their end coils over shoulders or projections adapted to receive and retain them instead of securing them to the brackets by screwing or coiling, as has been commonly done in the past. This being the case, I do not deem it necessary to further describe or illustrate modifications of the essential idea or principle of my invention. I will say, however, that in designating certain parts of the bracket as "side projections" I have merely used this term to distinguish them from the middle projection, and by its use I simply mean to designate those parts of the bracket which most nearly approach to the center of the diameter of the spring, whether the metal between the projections be cut away or not.

I understand and intend brackets having the side projection on the inside and the middle projection on the outside of the end coil, when the spring is in place, to be within and covered by my generic claims herein; but for the sake of further protection I have made this form of bracket the subject of another application, of which this is a division.

What I claim, and desire to secure by Letters Patent, is—

1. A bracket for platform rocking-chair attachments, having side and middle projections for securing one end of the spring, and at least one of said projections having a shoulder and being adapted to be inserted between the coils of the spring, said shoulder being on the inside of the end coil when the spring is in place, whereby the spring is held in place and prevented from being drawn away from the rockers and base-rails of the chair, substantially as described.

2. A bracket for platform rocking-chair attachments, having side projections to partially embrace or encircle the sides of the end coil of the spring, and a middle projection, the middle projection having a shoulder and being adapted to be inserted between the end coils of the spring, said shoulder being on the inside of the end coil when the spring is in place, whereby the spring is held in place and rigidly attached to the upper and lower parts of the chair, respectively, substantially as described.

WILLIAM I. BUNKER.

Witnesses:

E. F. HUBBARD,  
THOMAS A. BANNING.