

No. 607,895.

Patented July 26, 1898.

A. G. STEINBRENNER.

SLACK ADJUSTER.

(Application filed Dec. 9, 1897.)

(No Model.)

Fig. 1.

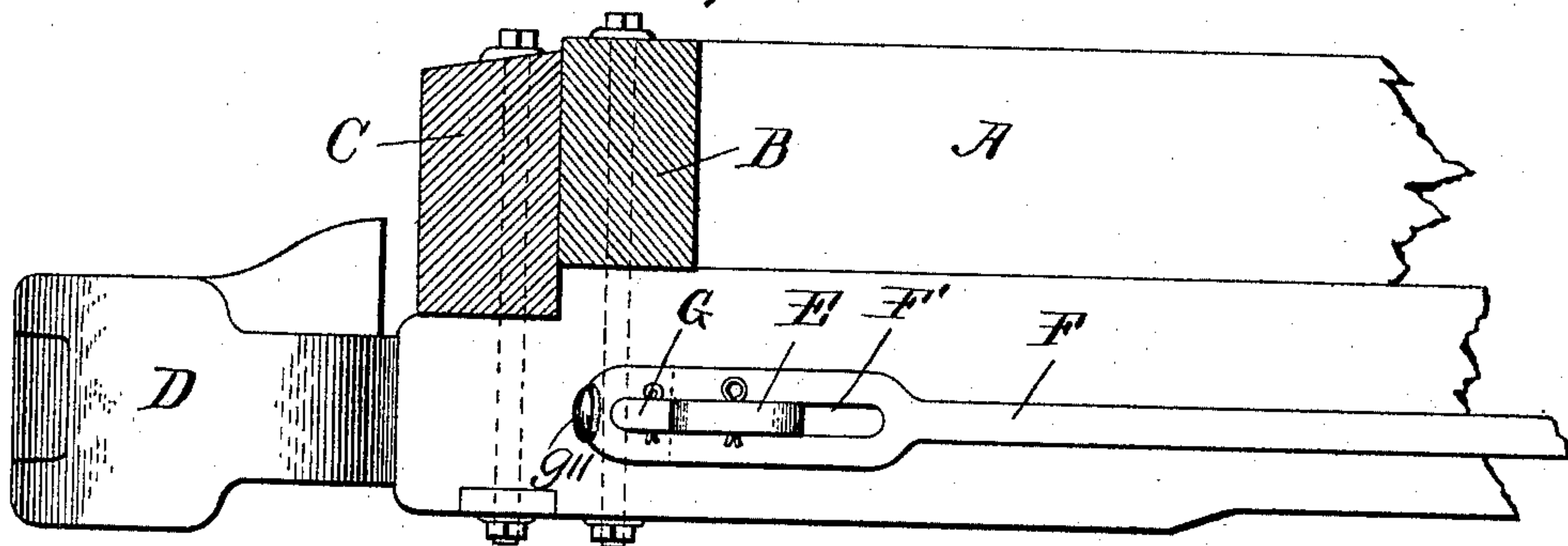


Fig. 2.

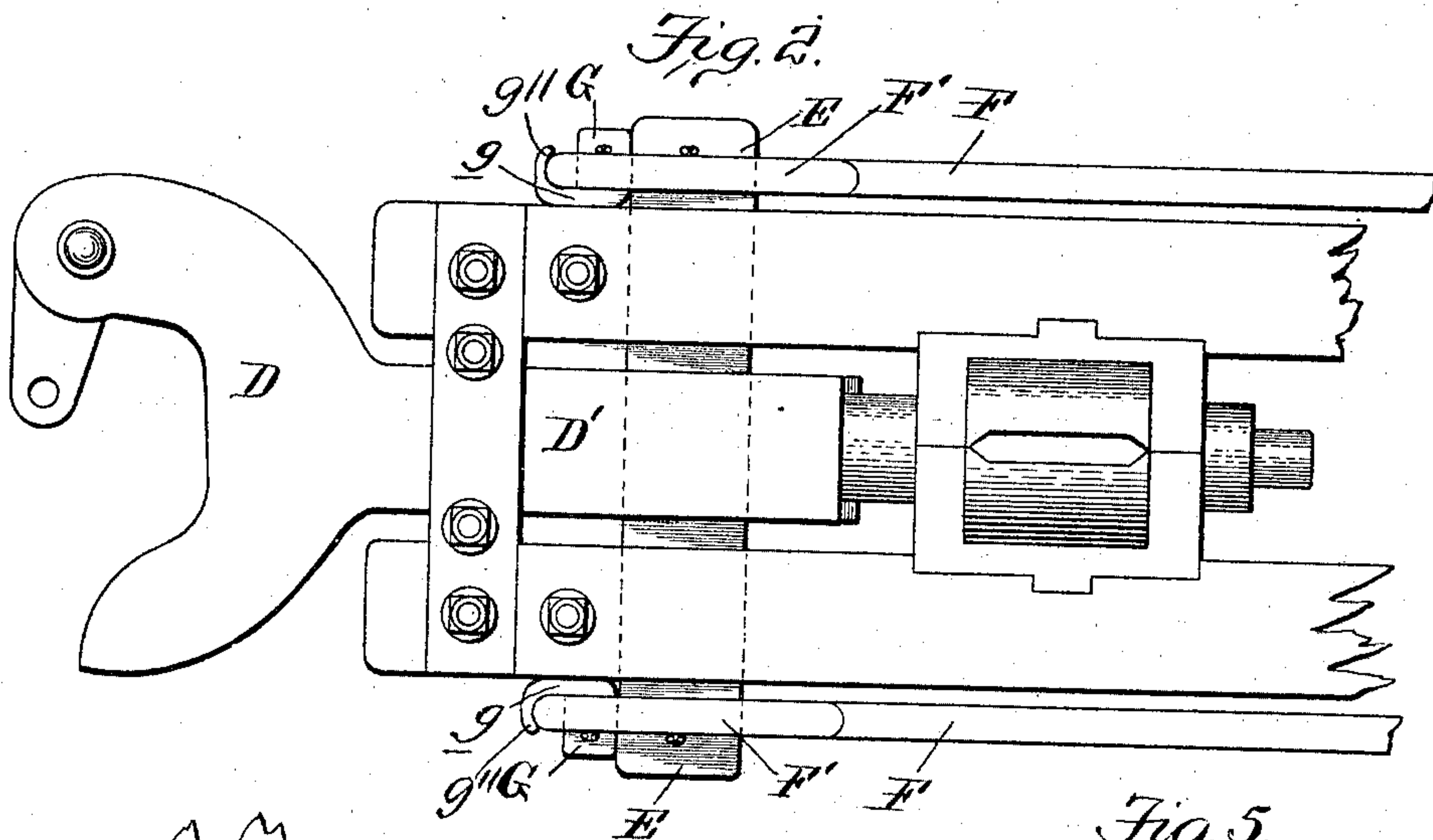


Fig. 3.

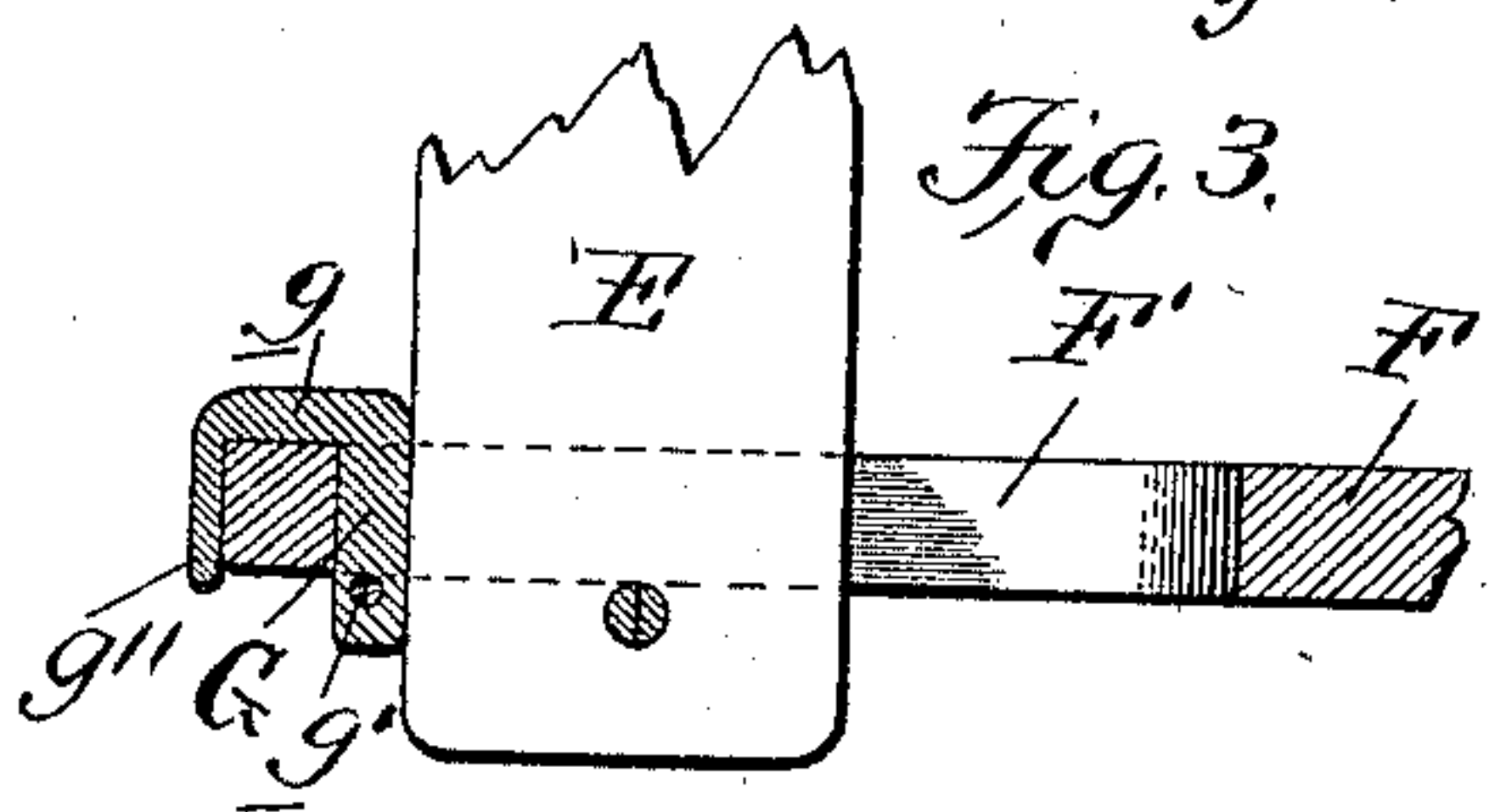


Fig. 4.

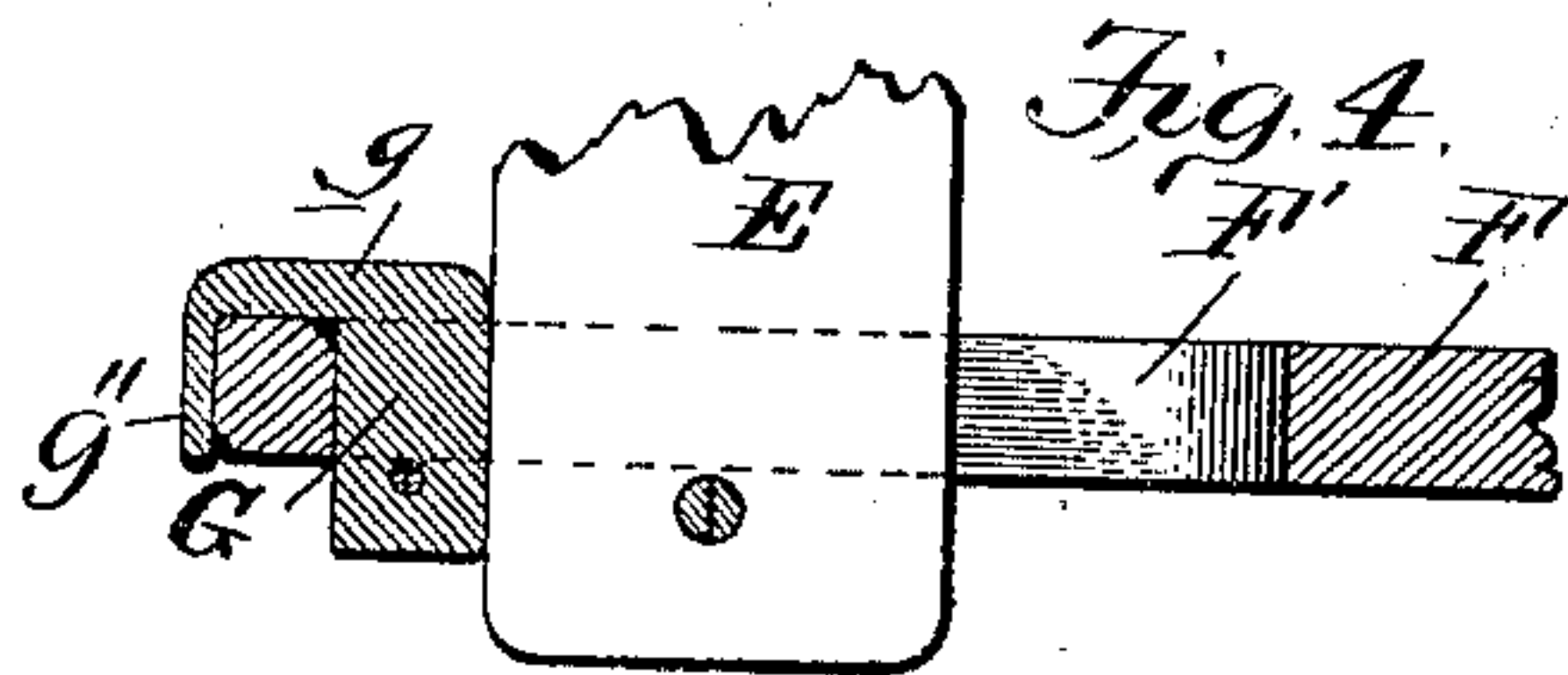


Fig. 5.

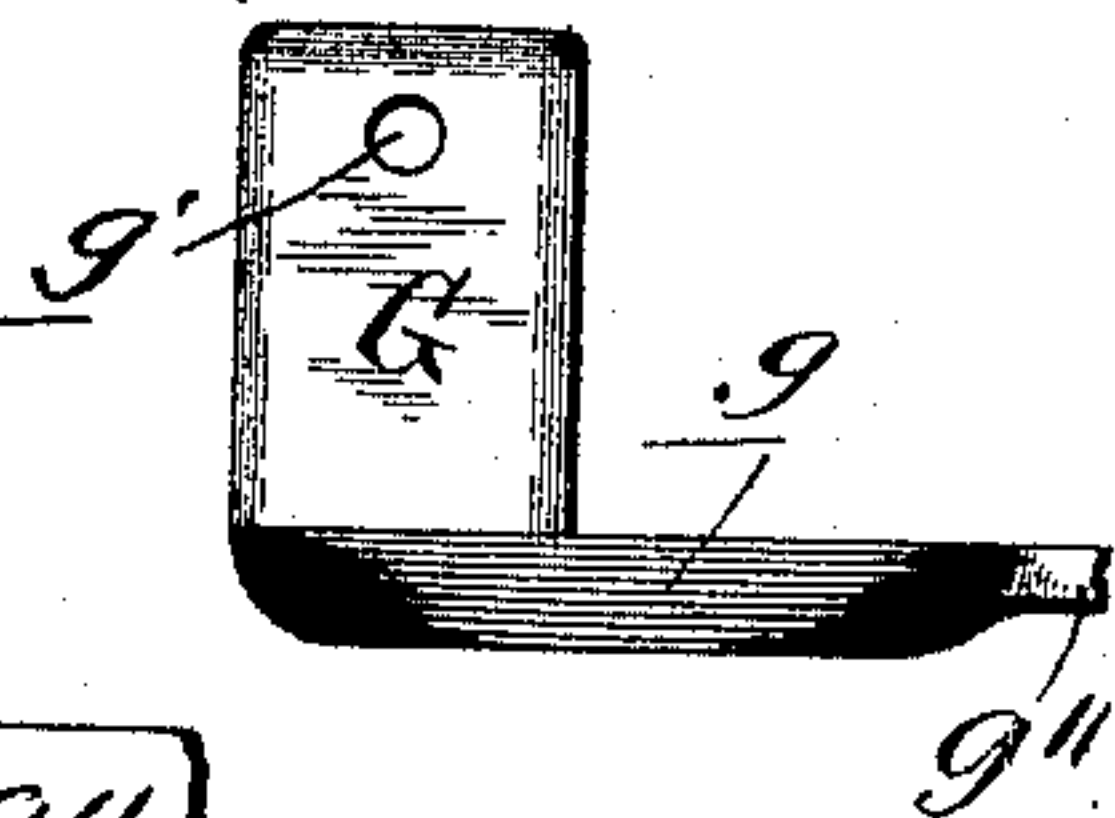


Fig. 7.

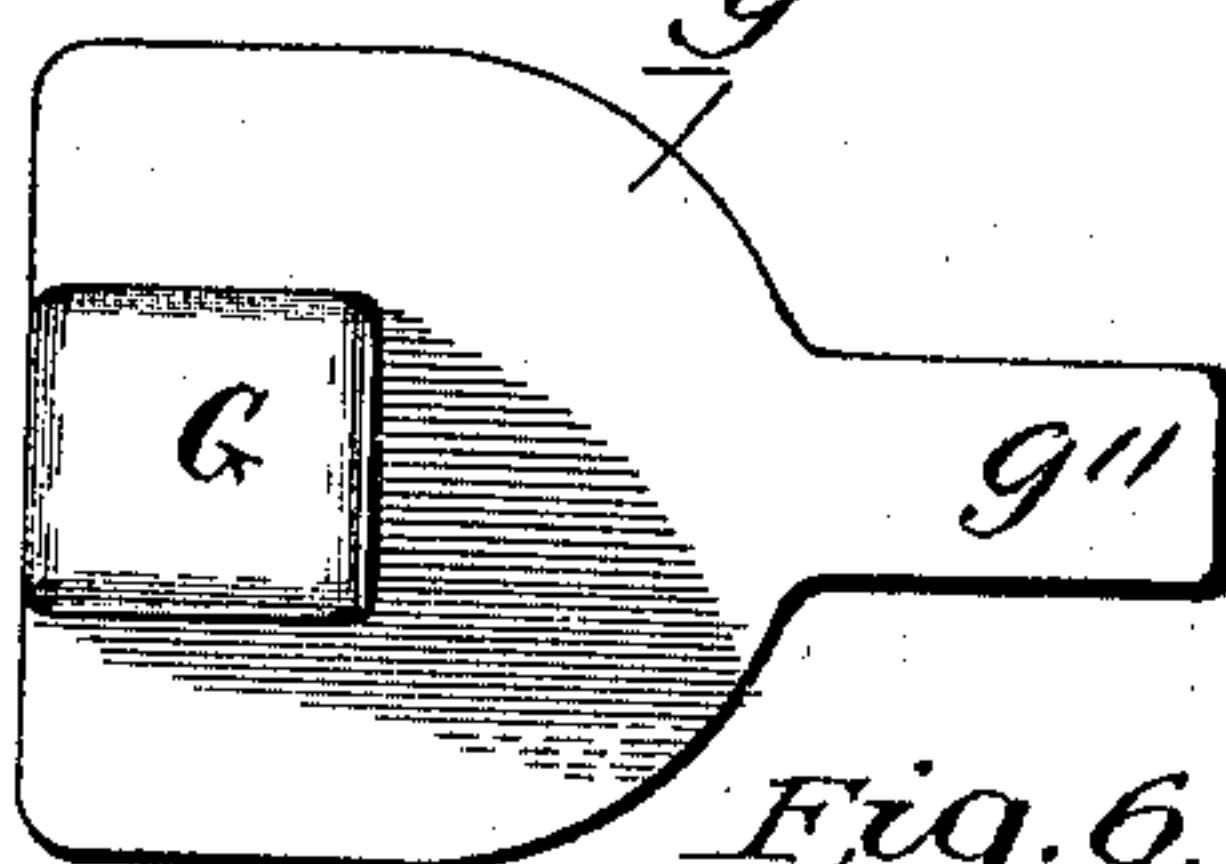
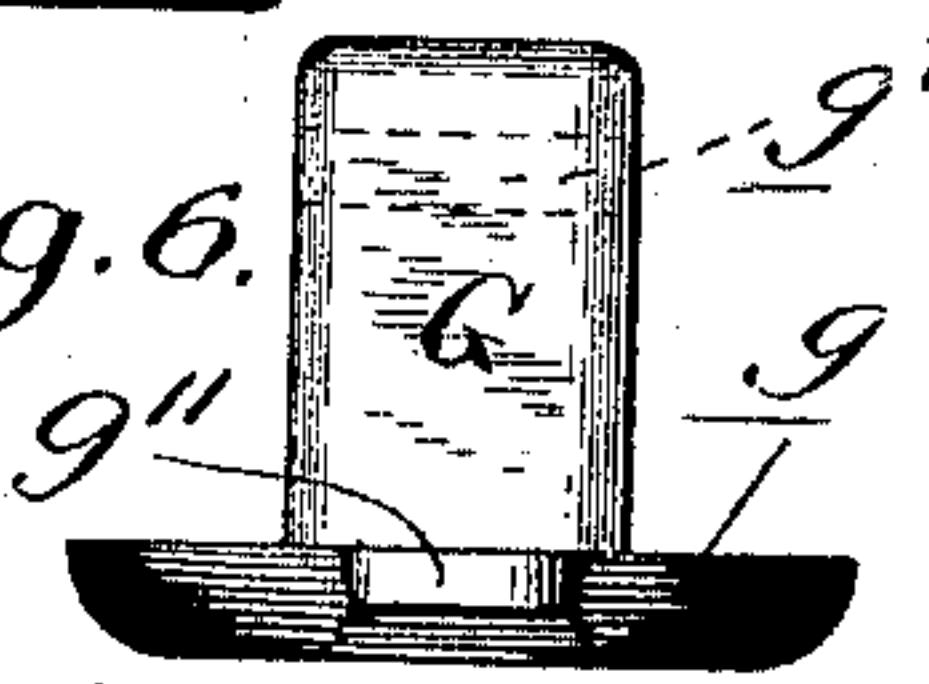


Fig. 6.



Witnesses:

G. A. Pennington
Wm. A. Scott

Inventor:

Andrew G. Steinbrenner
by Baker & Cornwall
Attys.

UNITED STATES PATENT OFFICE.

ANDREW G. STEINBRENNER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE
WESTERN RAILWAY EQUIPMENT COMPANY, OF SAME PLACE.

SLACK-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 607,895, dated July 26, 1898.

Application filed December 9, 1897. Serial No. 661,276. (No model.)

To all whom it may concern:

Be it known that I, ANDREW G. STEINBRENNER, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have made a certain new and useful Improvement in Slack-Adjusters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevational view of an approved form of draft-gear, showing my improved slack-adjuster in position. Fig. 2 is a bottom plan view. Fig. 3 is a detail sectional view showing one of the smaller blocks in position. Fig. 4 is a similar view showing a larger block in position. Figs. 5, 6, and 7 are detail views of my improved adjusting-block.

This invention relates to a new and useful improvement in slack-adjusters and is especially adapted for taking up the slack in the draw-rods of continuous draft-gear of railway-cars; but I am also aware that my invention may be applied to take up the slack in other metallic rods which are subjected to tensile strain or contraction and expansion due to changes in temperature.

Generally stated, this invention may be said to be an improvement upon the device shown and described in United States Letters Patent No. 528,117, granted to me the 23d day of October, 1894. The device shown in that patent, while practical and effective, is more expensive to produce, requires more material in casting, and is not as easily and readily applied as my present device. By my present invention I comprehend the casting of single adjusting lugs or blocks, thereby dispensing with so much material as is required in the manufacture of the transpositive adjusting device shown in my former patent, inasmuch as but one lug is operative, while the other is practically idle in that construction, thus combining the saving of material with lightness and producing an adjuster which is more readily and quickly applied.

In the drawings, A indicates the longitudinal sills, B the head-block, and C the buffer-block. D indicates the coupler, and D' the

shank. E indicates the cross-key, and F the continuous draft-rods. All of the aforementioned parts are of usual or well-known construction.

The draft-rods F are formed at each end with elongated loops F'; but as the construction is the same at each end of the car I have deemed it advisable to illustrate but one end of the draft-gear.

G indicates my improved adjusting lug or block. (More clearly shown in detail in Figs. 5, 6, and 7.) These lugs are formed with retaining-flanges *g* and perforations *g'*, through which are adapted to be passed cotter-pins or other suitable securing devices. The flanges *g* form a wear-shoe which is adapted to bear against the draft-timbers, and the edges of the contiguous face of the wear-shoe being rounded, as shown, the timbers are not cut or injured by the constant rubbing action when the car is in transit. This I consider an important feature in my improved adjuster, because I have found in practical experience that where the edges have been left sharp or well defined the wear-shoe would cut into and mar the timbers, the result being that in a short time a groove would be worn, thereby causing lateral play of the looped end of the draft-rod and more rapid wearing of the parts due to the continual friction.

If desired, the cotter-pin may be dispensed with in the outer end of the adjusting-block and the retaining-flange *g* depended upon to hold the block in place. In this case the cotter-pin in the end of the cross-key will serve to retain the looped end of the draft-rod in contact with the wear-shoe, which is interposed therebetween and the draft-timber, said shoe preventing the outward movement of the block.

On the block G is preferably formed a lug *g''*, extending forwardly from the flange *g*, said lug being designed to be bent around the end of the loop F', thereby engaging itself thereto, and thus preventing the block G from slipping out of or becoming misplaced on said loop F' when the draw-bar D is struck a blow, as in coupling.

In the drawings, at Figs. 3 and 4, I have shown two adjustments; but I wish it under-

stood that my invention comprehends the making of the adjusting-blocks in various sizes to meet varying conditions in the slack occasioned by the stretch in rods, due, perhaps, to the strain thereon in hauling heavily-laden cars upgrade or changes in temperature.

I am aware that many minor changes in the construction of my improved adjusting lug or block may be made without in the least departing from the nature and principle of the invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination with the draft-timbers, the looped ends of the draft-rods, and the cross-keys fitting in said looped ends, and slack-adjusting blocks comprising body portions G, interposed between said cross-key and the outer ends of the draft-rod loops,

wear-shoes *g* on said lugs or blocks, which are interposed between the loops of the draft-rods and the draft-timbers, and lugs *g''* projecting from the front edges of the wear-shoes, which lugs are adapted to be bent around the ends of the draft-rod loops for securing the adjusting-blocks in position, substantially as described.

2. The herein-described slack-adjusting block, the same comprising the body portion, a flange forming a wear-shoe, the inner corners of said flange being rounded, and a lug *g''* projecting from the front edge of said flange, substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 1st day of December, 1897.

ANDREW G. STEINBRENNER.

Witnesses:

F. R. CORNWALL,
HUGH K. WAGNER.