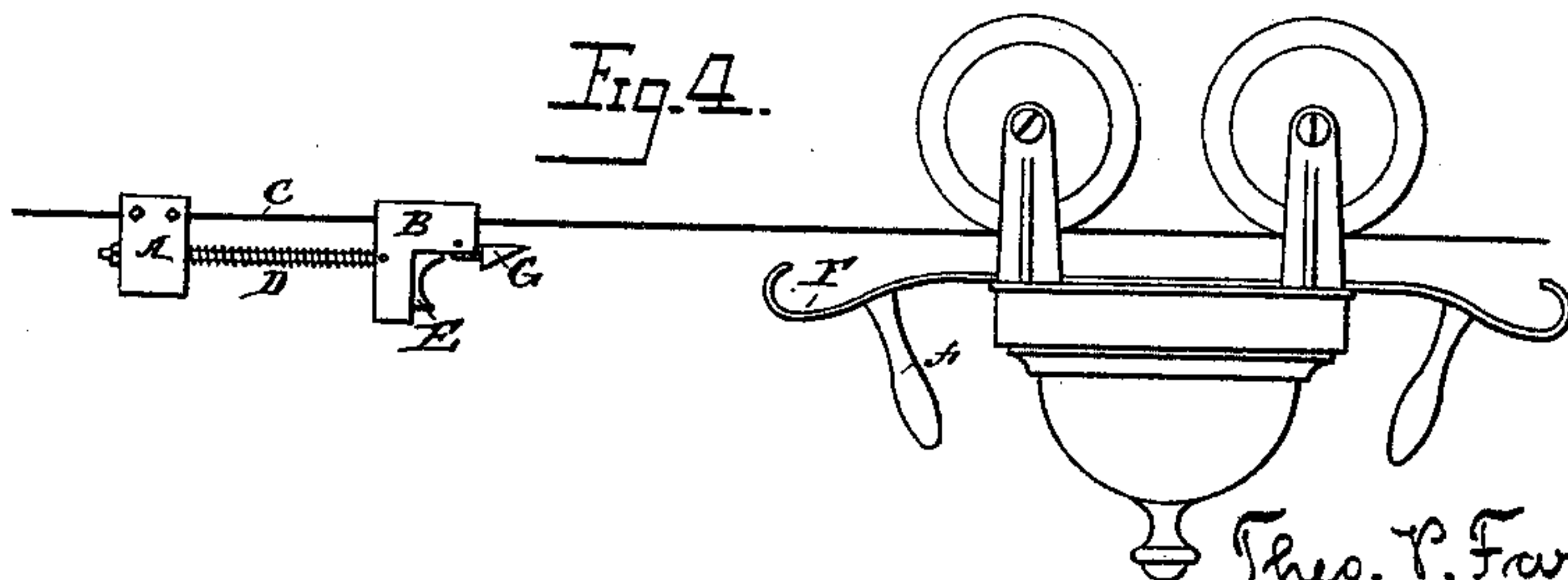
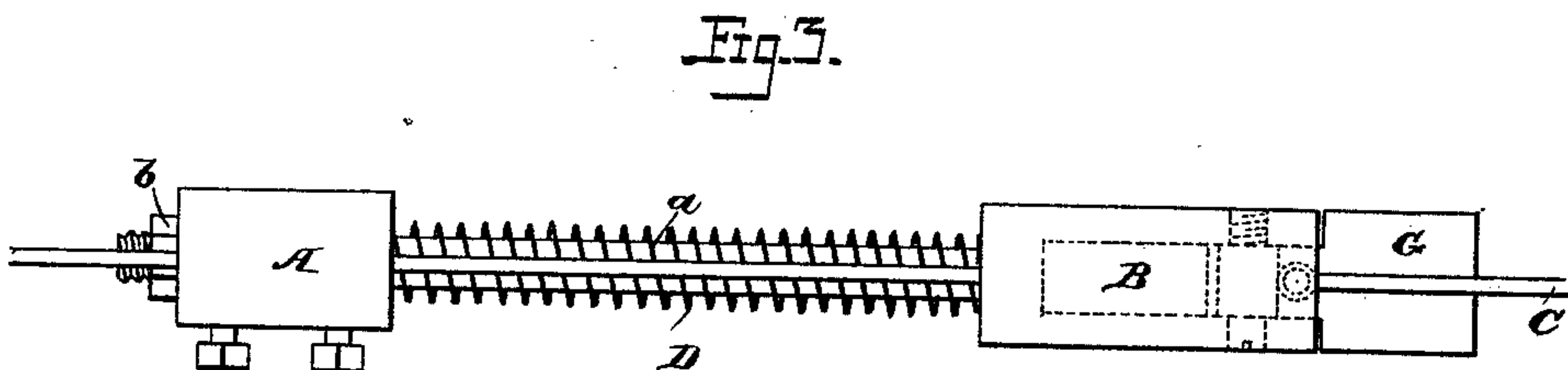
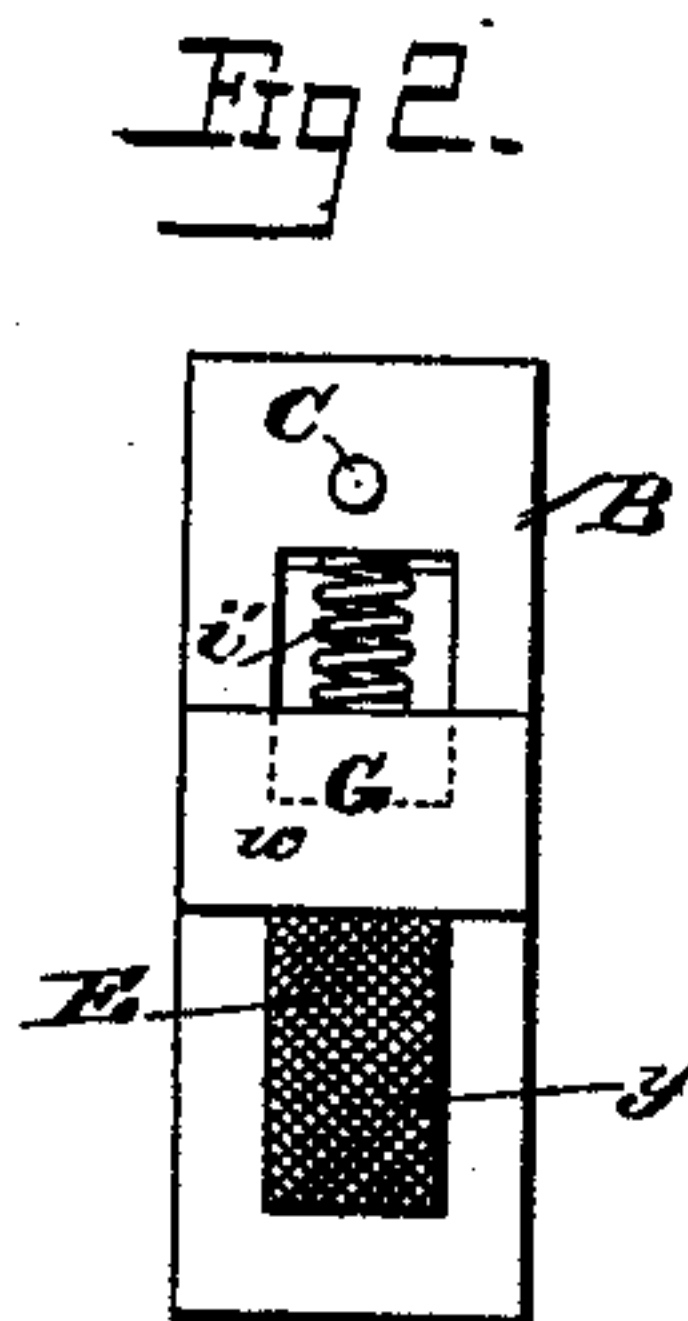
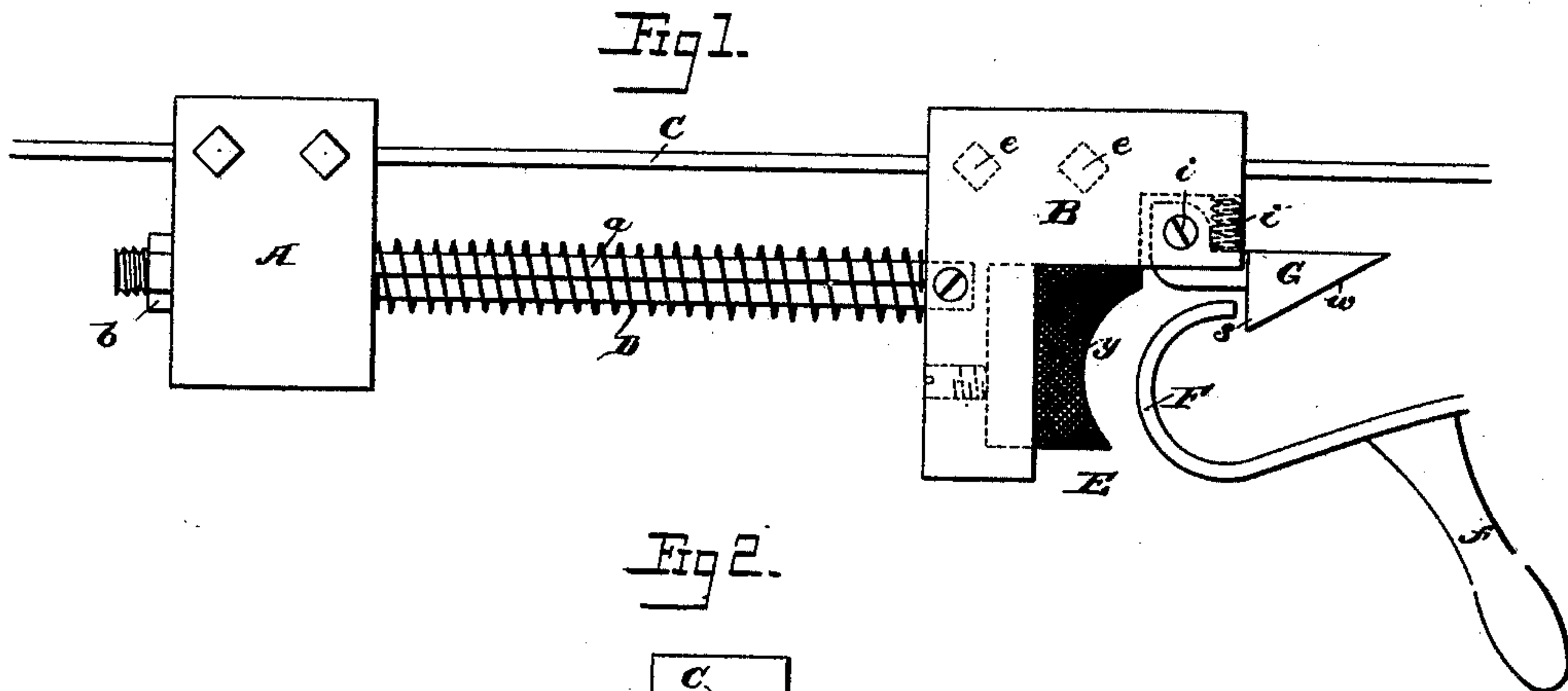


(No Model.)

T. P. FARMER.  
STORE SERVICE BUFFER.

No. 414,032.

Patented Oct. 29, 1889.



Attests:  
J. P. Fournier  
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# UNITED STATES PATENT OFFICE.

THEODORE P. FARMER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE  
LAMSON CASH RAILWAY COMPANY, OF SAME PLACE.

## STORE-SERVICE BUFFER.

\*SPECIFICATION forming part of Letters Patent No. 414,032, dated October 29, 1889.

Application filed February 19, 1885. Serial No. 156,428. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE P. FARMER, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and  
5 useful Improvements in Store-Service Buffers, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention has for its object to prevent  
10 the sudden jars and strains which result from the abrupt stoppage of the movement of the cars in store-service apparatus; and my invention consists in constructing the arresting device, as fully set forth hereinafter, so as  
15 to stop the car quickly, but without too sudden an action.

In the drawings, Figure 1 is a side elevation of an arresting device embodying my invention. Fig. 2 is an end view. Fig. 3 is a  
20 plan. Fig. 4 is an elevation showing a wire, arresting device, and car.

A is a stationary portion of the buffer or arresting device, provided with any suitable appliances for securing it to the wire C.

25 B is the movable portion of the buffer, perforated to receive the wire on which it slides. D is an interposed spring of any suitable form and dimensions, and *a* is an arm-extension or rod projecting from one portion of the  
30 buffer to or through the other, so as to slide through the latter, and provided with a head, nut, bearing, or lip *b*, which limits the forward movement of the part B. The spring is preferably coiled upon the rod *a*, but it may  
35 be coiled around the wire.

In a socket in the part B is fitted a bearing E, of rubber or other elastic material, having a curved face *y*, adapted to the curved end of a catch F upon the car, and  
40 the part B is provided with a shoulder *s*, adapted to engage with the end of the catch when the car moves forward or rebounds after the catch F has struck the bearing E of the buffer. The shoulder *s* may be upon  
45 a stationary portion of the movable part B. I prefer, however, to form it upon a dog G, pivoted at *i* to the portion B, with a spring *i'*, tending to keep it in the position shown

in Fig. 1, so that the contact of the catch F with a bevel-face *w* of the dog will cause  
50 the latter to rise until the end of the catch passes the shoulder *s*, when the dog will fall into a position to present the shoulder in the way of the catch F when the carrier rebounds. The bearing E not only prevents  
55 noise when the catch strikes the buffer, but, further, prevents wear and co-operates with the spring D to reduce the shock occasioned by the sudden stoppage of the carrier, and the curved face *y* co-operates with  
60 the curved spring end of the catch F to afford an extended bearing, which also reduces the shock, noise, and wear. In some instances the bearing E alone may be used to absorb the shock, the forward end B in  
65 such case being secured by set-screws *e*, or otherwise, in a stationary position on the wire, and the spring D and portion A being dispensed with. The catch F is usually provided with a handle *f*, pressure on  
70 which first disengages the catch from the shoulder *s*, and then propels the car on the wire.

Without limiting myself to the precise construction shown, I claim—

1. The combination, in a buffer for store-service apparatus, of the stationary section A, movable section B, provided with an elastic bearing E, and a pivoted dog having a shoulder *s* and an interposed spring, substantially as specified. 75

2. The combination, in a buffer for store-service apparatus, of a section A and means for securing it to the wire, the movable section B, provided with an elastic bearing E,  
85 and a pivoted spring-seated dog G, a spring interposed between said sections, and an arm or rod *a*, provided with a head or bearing *b*, substantially as specified.

3. The combination, with the car having a  
90 movable catch provided with a handle, of the stop carrying a pivoted dog having an inclined face *w* and an elastic bearing E, substantially as described.

4. The combination, in a buffer for store-  
95 service apparatus, of the stationary section,



the movable section provided with an elastic bearing, a pivoted dog having a locking shoulder, and a spring interposed between the sections, and a carrier provided with a catch, and a handle secured to the latter, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

THEODORE P. FARMER.

Witnesses:

AMBROSE EASTMAN,  
JAMES R. POWERS.