

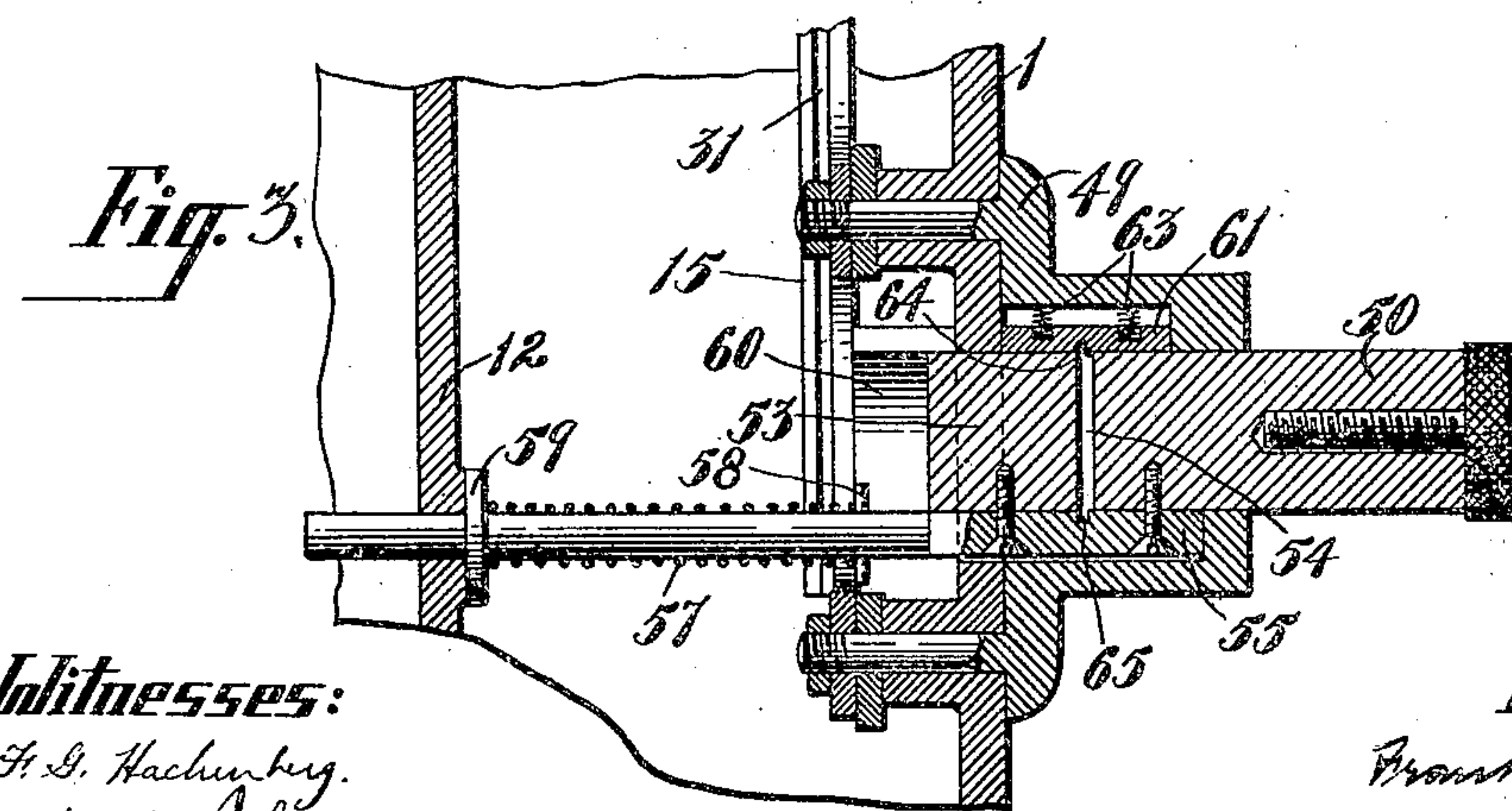
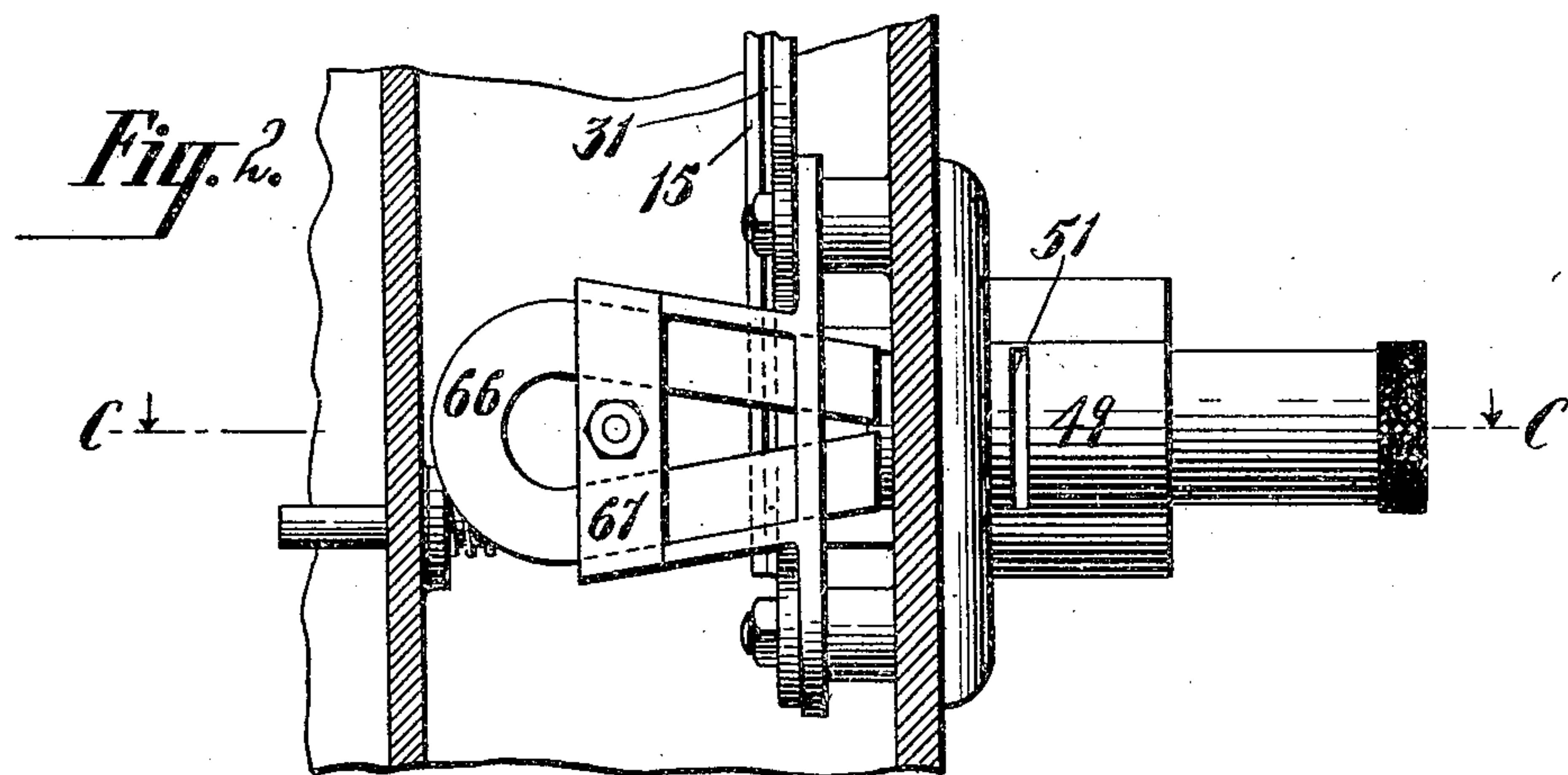
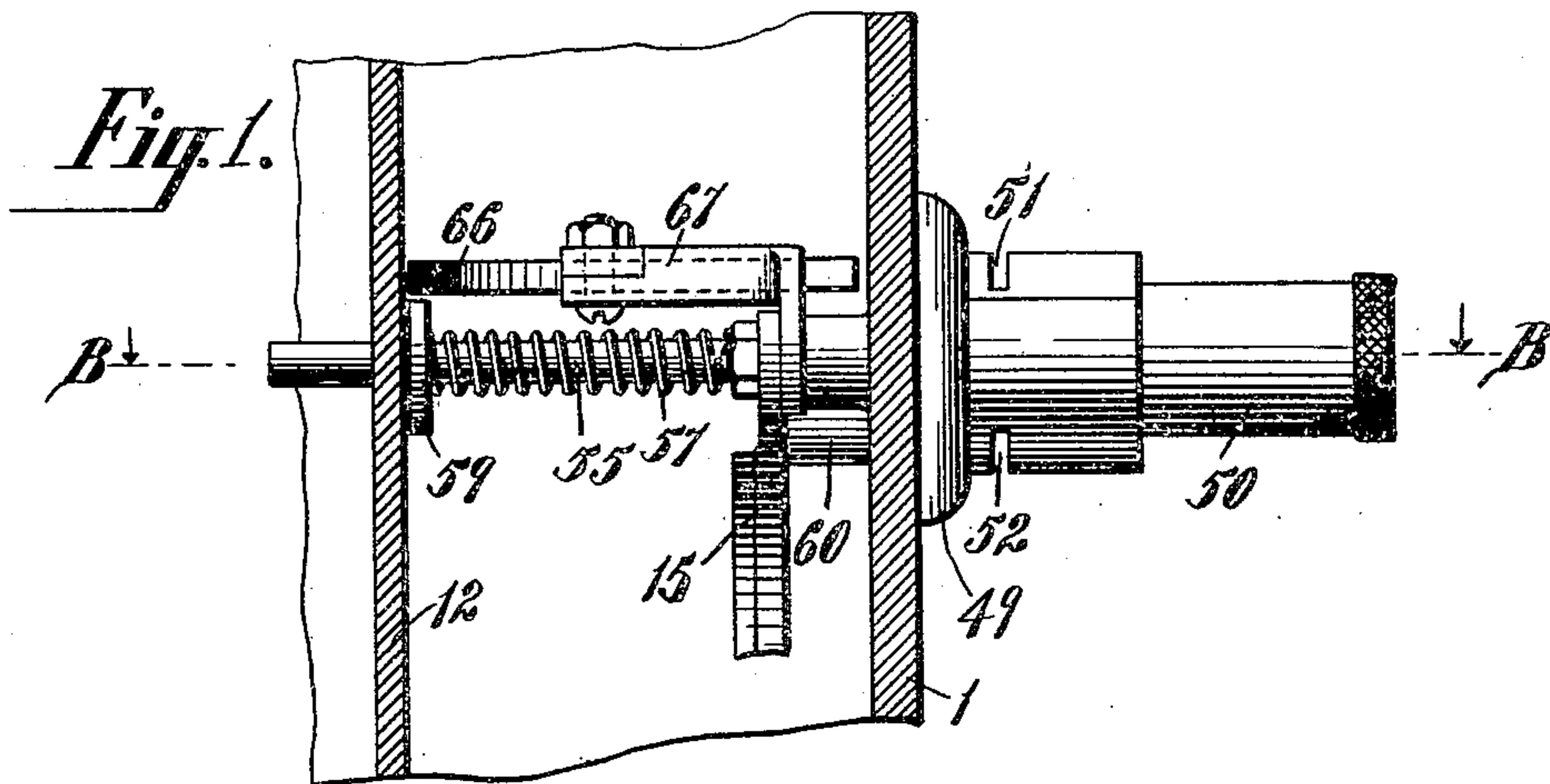
No. 816,515.

PATENTED MAR. 27, 1906.

F. W. TUCKER.  
COIN CONTROLLED VENDING MACHINE.

APPLICATION FILED JULY 1, 1903.

2 SHEETS—SHEET 1.



*Witnesses:*

*H. L. Hachumberg.*  
*Henry A. Hachumberg*

*Inventor.*

*Frank W. Tucker*  
*by attorneys*  
*Thompson & Howard*

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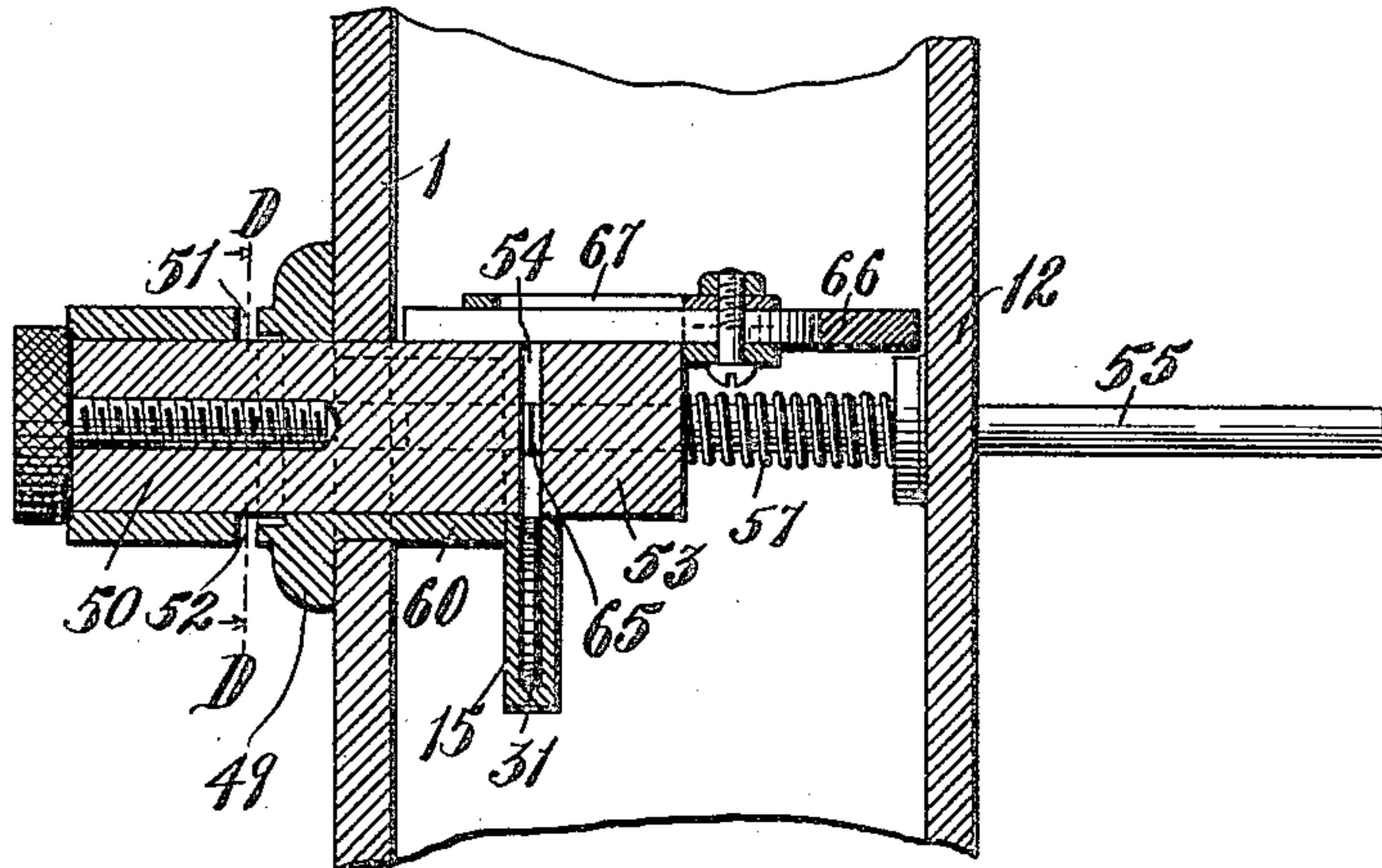
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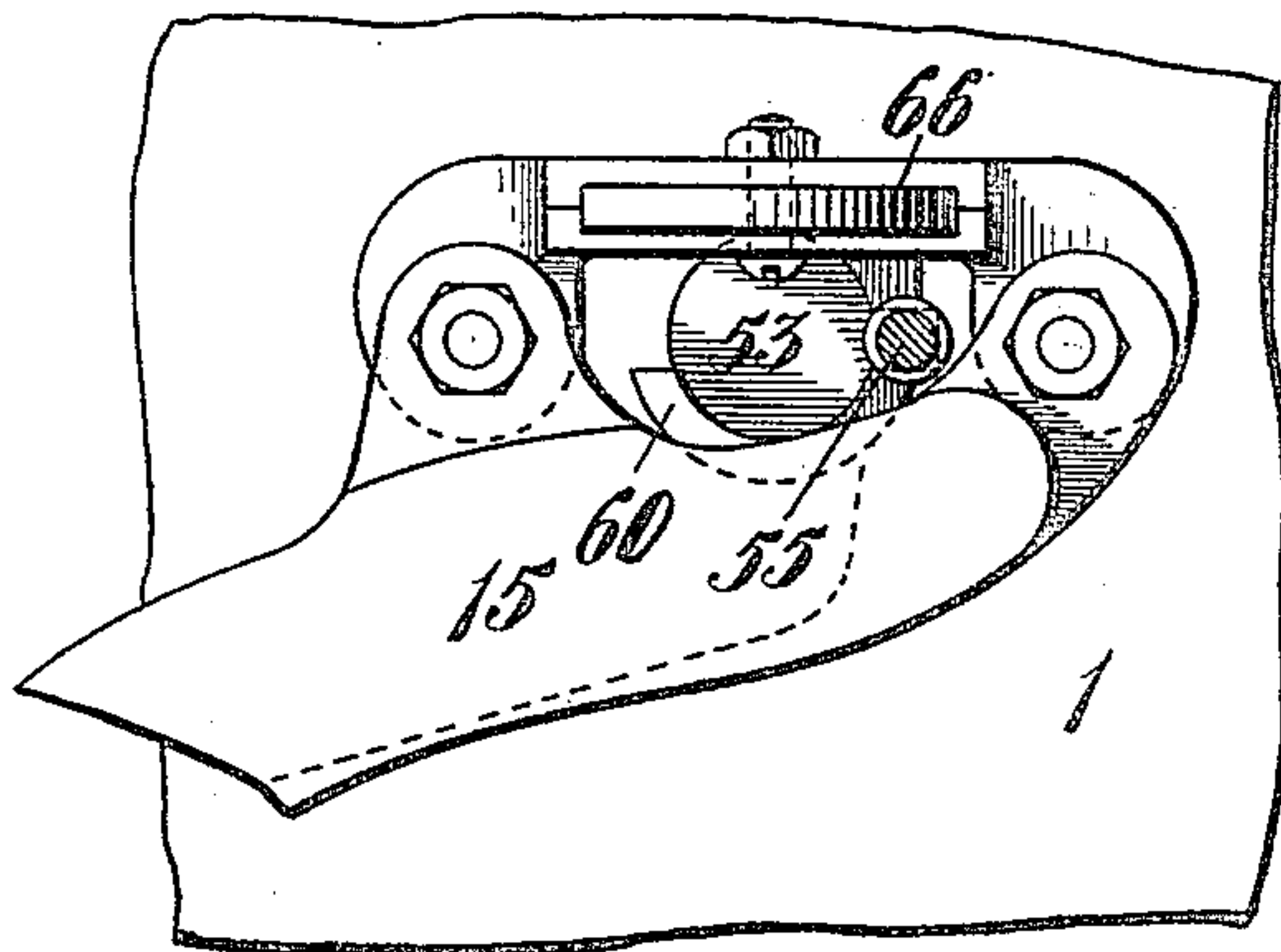
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2 SHEETS—SHEET 2.

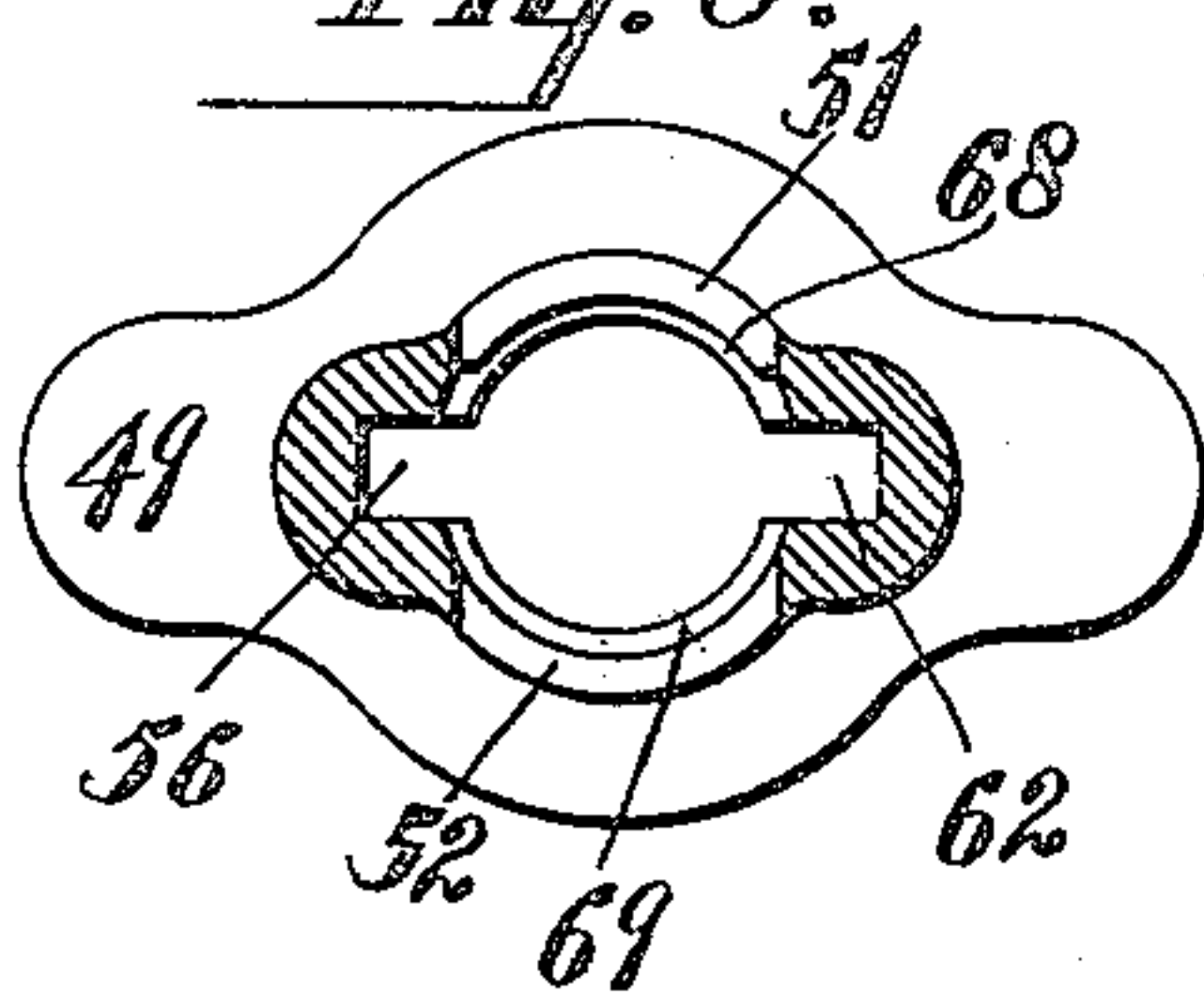
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



*Witnesses:*

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*Henry Phime.*

*Inventor:*

*Frank W. Tucker*  
*by attorneys*  
*Brown & Leonard*



# UNITED STATES PATENT OFFICE.

FRANK W. TUCKER, OF MILFORD, CONNECTICUT.

## COIN-CONTROLLED VENDING-MACHINE.

No. 816,515.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed July 1, 1903. Serial No. 163,899.

*To all whom it may concern:*

Be it known that I, FRANK W. TUCKER, a citizen of the United States, and a resident of Milford, in the county of New Haven and State of Connecticut, have invented a new and useful Coin-Controlled Vending-Machine, of which the following is a specification.

My invention relates, broadly, to coin-controlled vending-machines, and more particularly to the coin-operated mechanism for controlling the delivery mechanism of the machine.

The object of my invention is to provide certain improvements in the construction, form, and arrangement of the several parts of the coin-operated mechanism, whereby means are provided for insuring the accurate operation of the delivery mechanism in a very simple and effective manner and in which the liability of a coin or disk other than the coin of predetermined value operating the mechanism is reduced to a minimum.

The parts of the machine illustrated herein but not claimed are described and claimed in a copending application filed by me of even date herewith, its serial number being 163,898 and entitled "Improvements in vending-machines."

In the accompanying drawings, Figure 1 is a detail side view of the coin-receiving plunger and its adjacent parts. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse horizontal section taken in the plane of the line B B of Fig. 1 looking in the direction of the arrows. Fig. 4 is a vertical central longitudinal section taken in the plane of the line C C of Fig. 2. Fig. 5 is a view in rear elevation of the plunger and its adjacent parts, and Fig. 6 is a transverse vertical section taken in the plane of the line D D of Fig. 4.

The coin-receiving mechanism and the means for bringing the coin into position to drop into the coin-chute 15 is constructed, arranged, and operated as follows: A socket-piece 49 is secured to the front of the casing 1, and a cylindrical plunger 50 is fitted to slide therein. The socket-piece has a coin-receiving slot 51 through its top wall and a discharge-slot 52 in its bottom wall in alinement with each other and communicating with the periphery of the plunger 50. The plunger comprises a main outer section 50 and an inner section 53, which sections are held a predetermined distance apart to form a coin-receiving space 54. This is accomplished in the present instance by means of a bar 55,

rigidly secured along the sides of the sections 50 53 of the plunger, which bar is fitted to slide in a squared recess 56 along the inner wall of the socket-piece 49. This bar 55 extends rearwardly into the interior of the casing and is guided and supported at its inner end in the vertical partition 12. A retracting-spring 57 surrounds the bar 55 and is interposed between an abutment 58, carried by the bar, and a loose washer 59, pressing against the partition 12. This spring 57 serves to normally hold the plunger at the limit of its outward movement, with its coin-receiving space 54 in alinement with the slots 51 52 in the socket-piece 49.

The socket-piece 49 is provided with a curved guard 60, which projects inwardly into the casing to a position in proximity to the receiving end of the coin-chute 15. This curved guard partially surrounds the plunger, and as the plunger is forced inwardly the guard serves to support the coin within the space 54 until the space is brought over the open top of the coin-chute in position to drop from the said space into the said coin-chute.

The means which I employ for holding the coin in position within the space 54 until the plunger has been forced inwardly beyond the slots 51 52 comprises a spring-actuated presser-plate 61, located within a recess 62 along the inner wall of the socket-piece 49, along the periphery of the plunger, and diametrically opposite to the bar 55. Springs 63 serve to hold the presser-plate against the periphery of the plunger.

The bar 55 and the presser-plate 61 are provided with narrow slots 64 65, which are opposite the space 54 for a portion of the width of the space when the plunger is in its normal position, so that a disk of greater diameter, but thinner than the predetermined coin, will pass entirely through the said space and out through the slot 52 when inserted through the slot 51 into position between the two sections of the plunger.

The upper and lower walls of the socket-piece are cut away, as shown at 68 69, adjacent to the slots 51 52. This will cause a coin or disk which is not engaged by the spring-actuated presser-plate 61 to form an abutment and prevent the plunger from being forced inwardly.

A magnet 66, shown herein of horseshoe form, is supported by a bracket 67 adjacent to the top of the plunger, so that as the plunger is forced inwardly the magnet will retain



a disk of iron or steel within the space in the plunger even if the disk is of the size of the predetermined coin, thus preventing the disk from falling into the chute 15. As the plunger is returned to its normal position the disk of iron or steel will be returned into a position where it will be forced out of the space in the plunger by the next succeeding coin.

What I claim is—

10 1. A coin-receiving plunger comprising outer and inner sections spaced apart forming a coin-receiving space, a socket-piece within which the plunger is fitted to slide having a coin-receiving slot through its wall and a  
15 spring-actuated pressure-plate in the socket-piece engaging the periphery of the plunger.

2. A coin-receiving plunger comprising outer and inner sections spaced apart forming a coin-receiving space, a socket-piece within  
20 which the plunger is fitted to slide having slots through its opposite walls and a spring-actuated pressure-plate mounted in the socket-piece in engagement with the periphery of the plunger, the said pressure-plate  
25 having a slot therein of less width than the space between the outer and inner sections.

3. A coin-receiving plunger comprising outer and inner sections, a bar secured to the peripheries of the outer and inner sections  
30 for spacing them apart to form a coin-receiv-

ing space, a slotted socket-piece within which the plunger is fitted to slide and a spring-actuated pressure-plate mounted in the socket-piece for supporting the predetermined coin together with the said bar.

4. A coin-receiving plunger comprising outer and inner sections, a bar secured to the peripheries of the sections for spacing them apart, a slotted socket-piece within which the plunger is fitted to slide and a spring-actuated pressure-plate mounted in the socket-piece in engagement with the peripheries of the outer and inner sections, the said pressure-plate and bar having slots therein of less width than the space between the said sections.  
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5. In combination, a socket-piece having a coin-receiving slot therein and a plunger fitted to slide within the socket-piece comprising inner and outer sections spaced apart, the plunger being the same size in cross-section as the predetermined coin.  
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In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 25th day of June, 1903.  
55

FRANK W. TUCKER.

Witnesses:

FREDK. HAYNES,  
HENRY THIEME.