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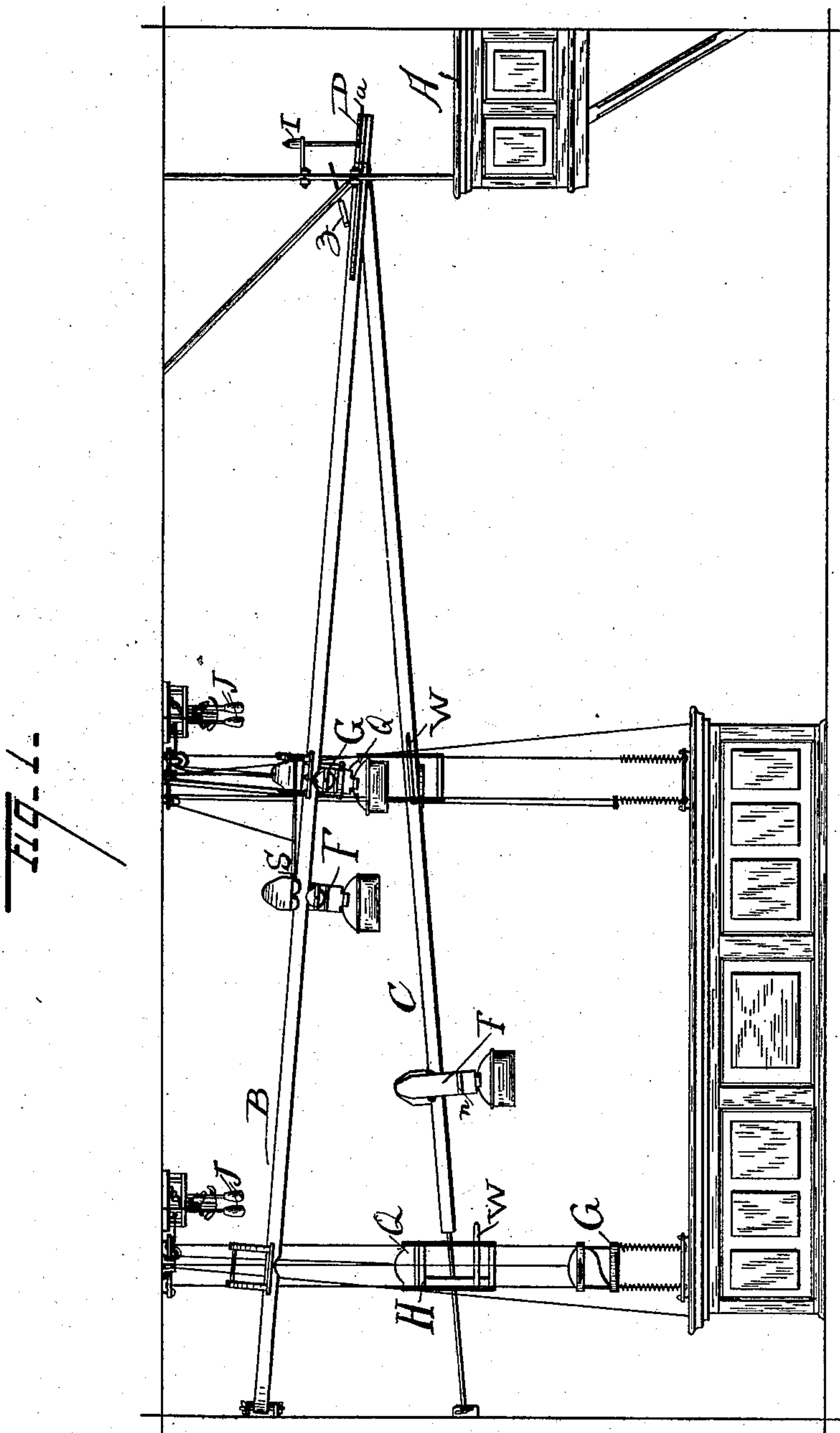
5 Sheets—Sheet 1.

J. BURNS.

CASH AND PARCEL CARRIER.

No. 373,172.

Patented Nov. 15, 1887.



WITNESSES

A. B. Paré
C. C. Luthicum.

INVENTOR

James Burns,
By Banning & Banning.
ATTORNEYS

(No Model.)

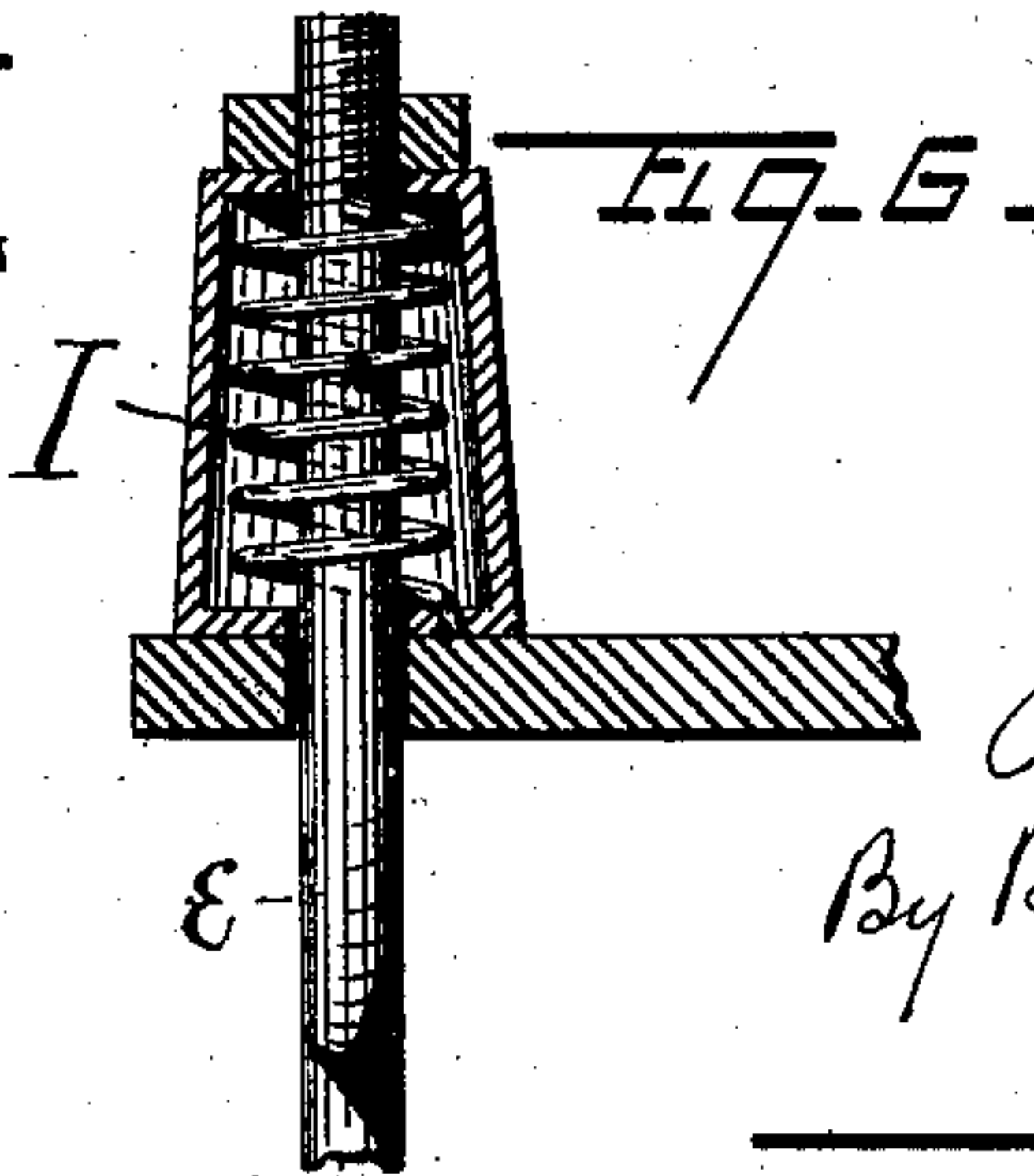
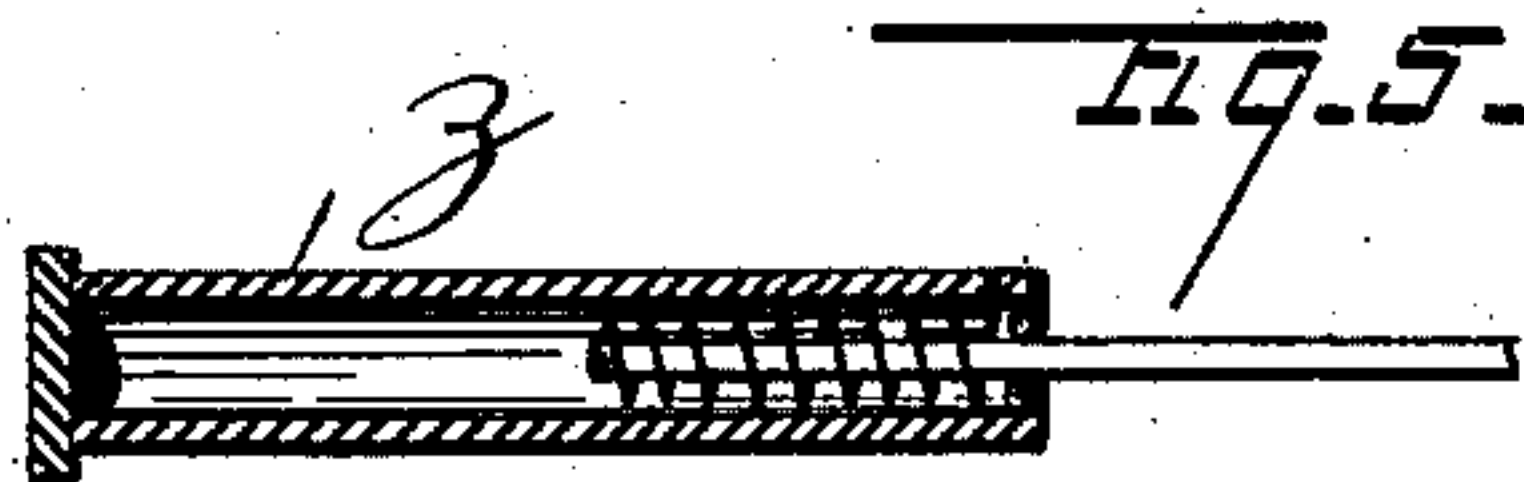
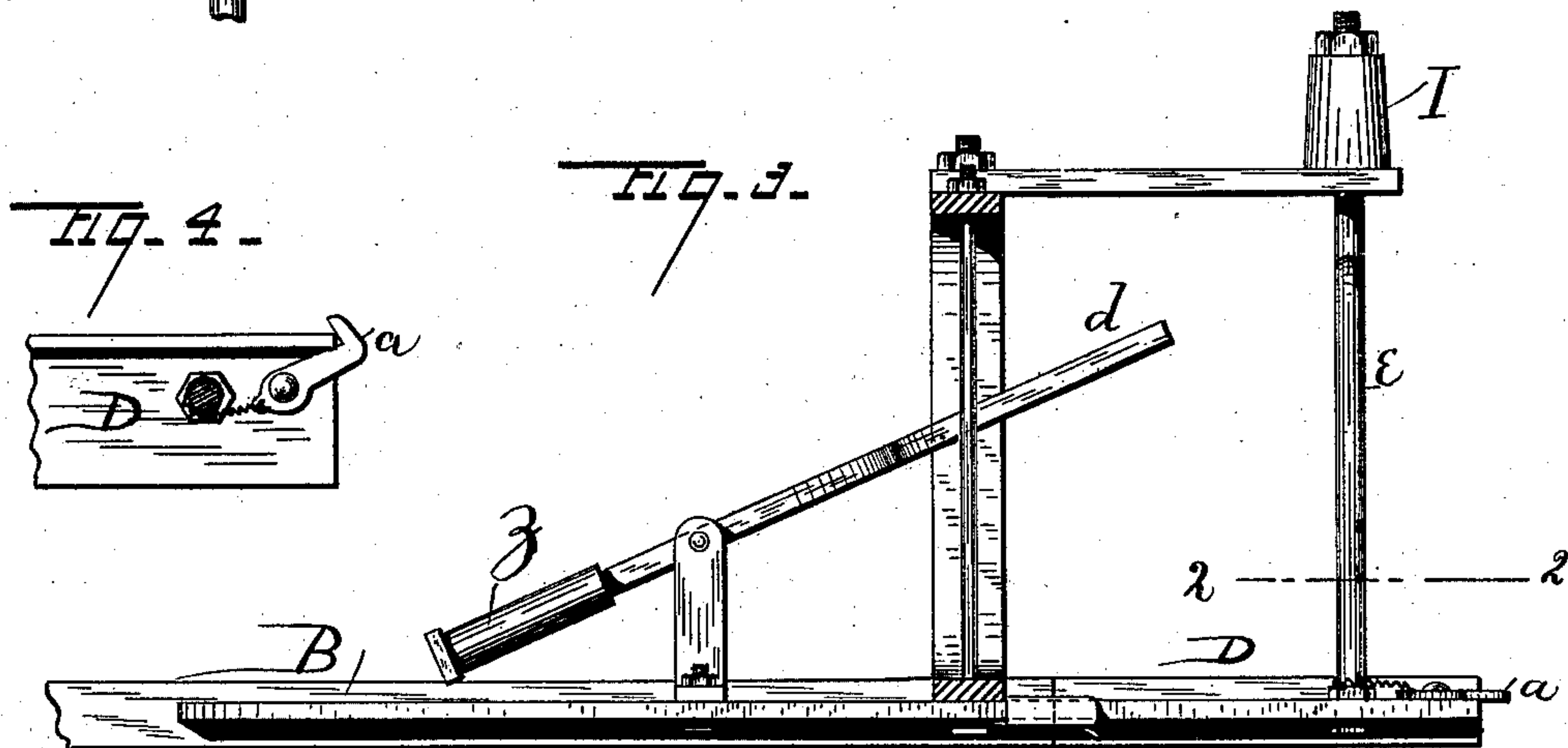
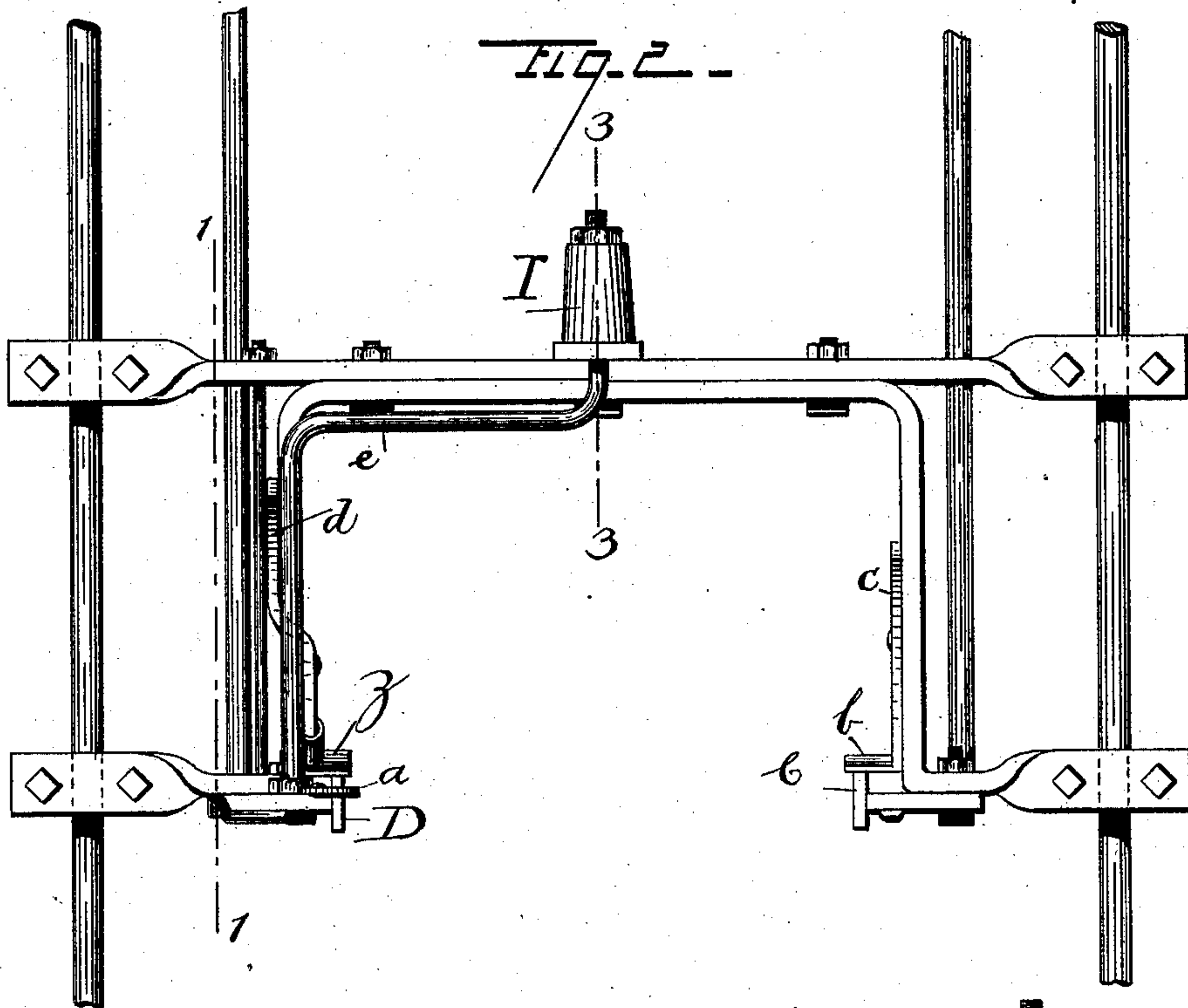
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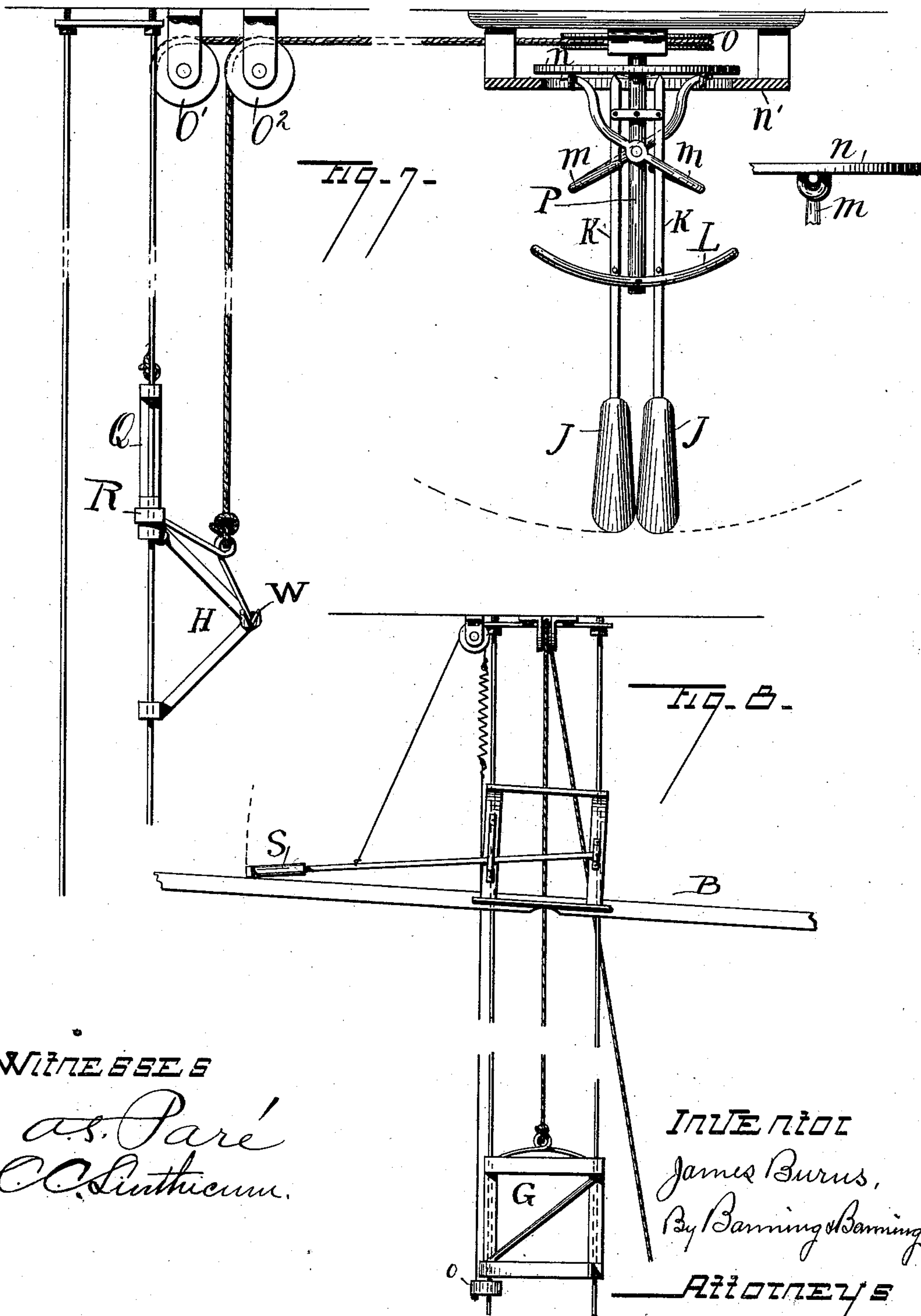
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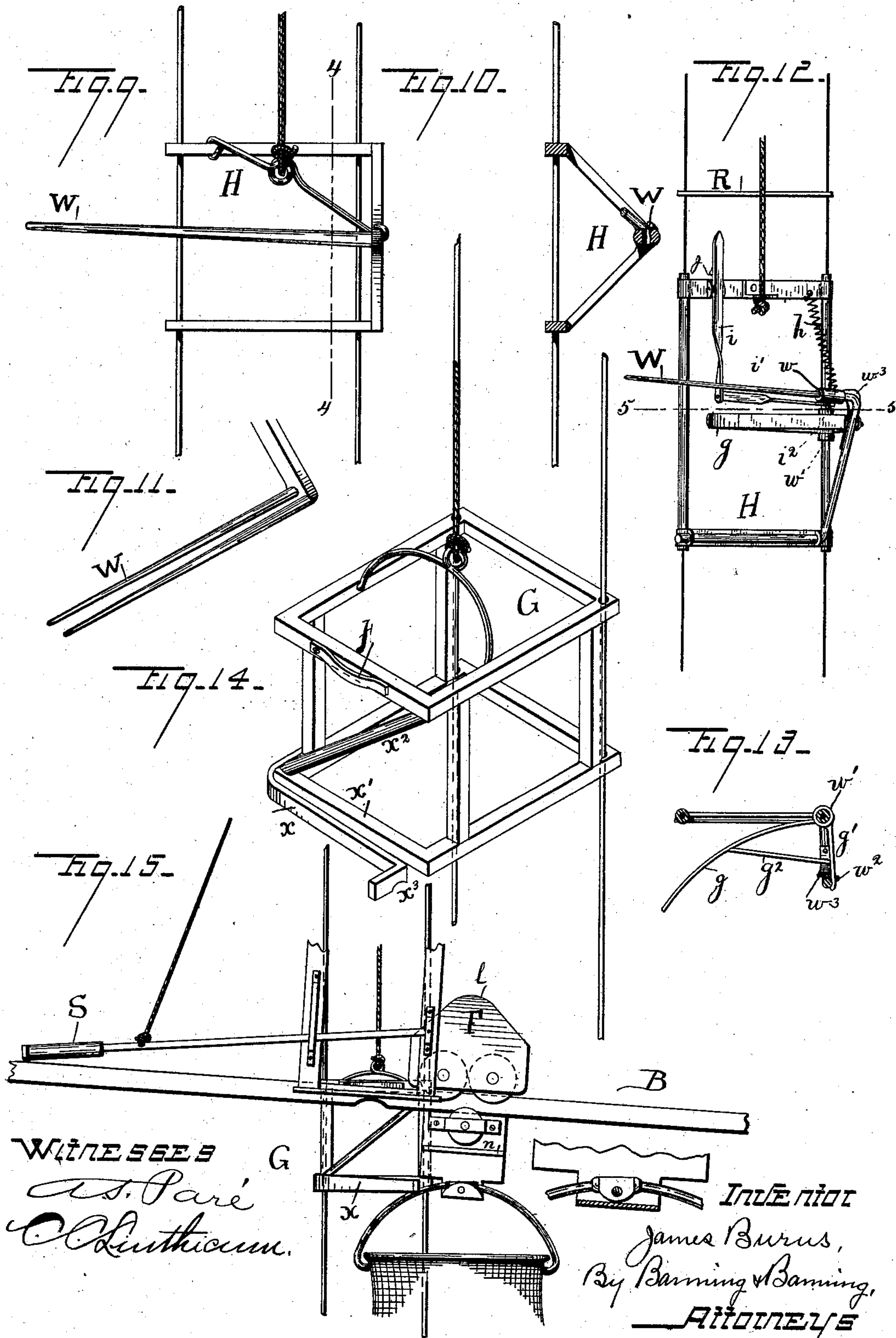
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J. BURNS.

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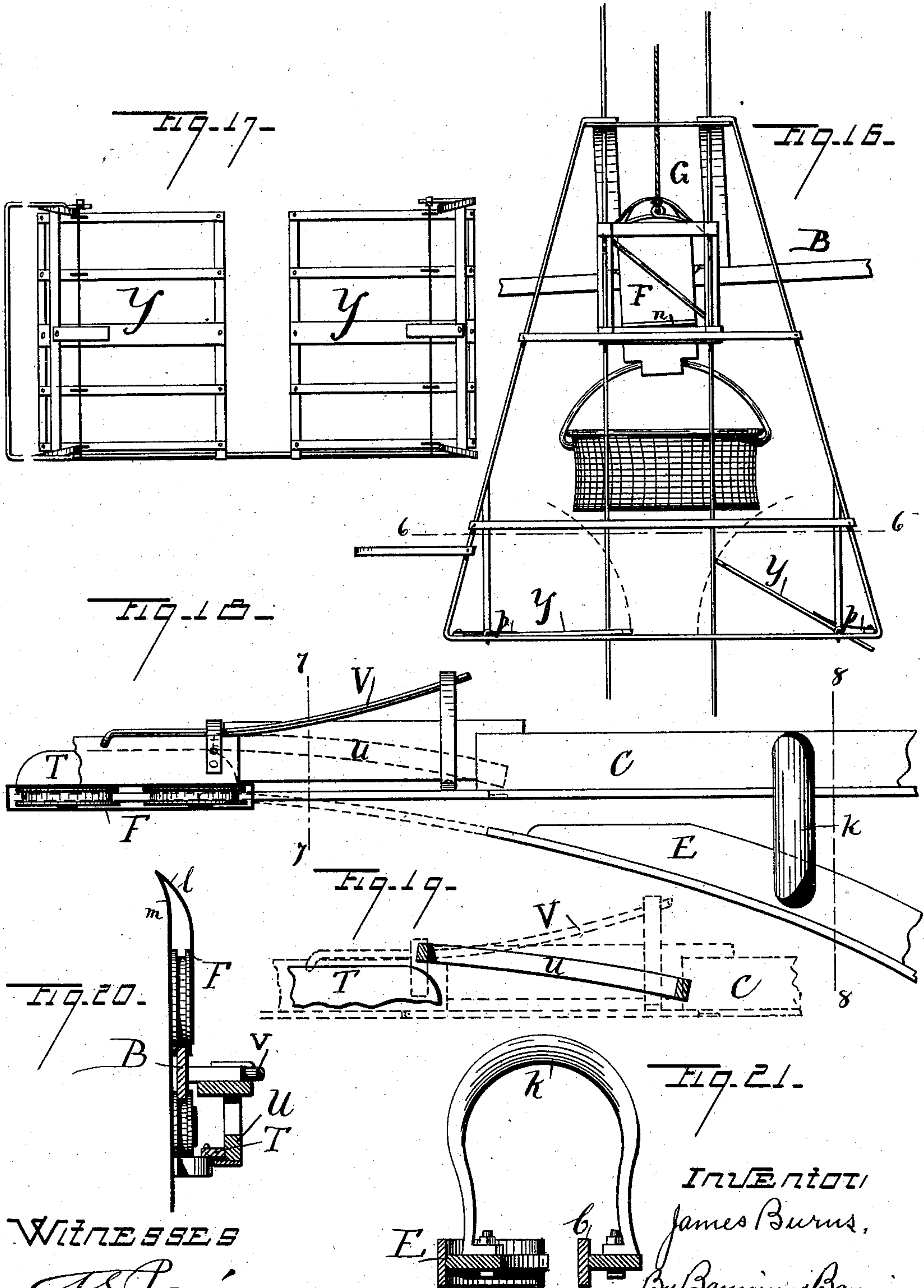
(No Model.)

5 Sheets—Sheet 5.

J. BURNS.
CASH AND PARCEL CARRIER.

No. 373,172.

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WITNESSES

A. S. Paré
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INVENTOR

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UNITED STATES PATENT OFFICE.

JAMES BURNS, OF CHICAGO, ILLINOIS.

CASH AND PARCEL CARRIER.

SPECIFICATION forming part of Letters Patent No. 373,172, dated November 15, 1887.

Application filed September 27, 1886. Serial No. 214,677. (No model.)

To all whom it may concern:

Be it known that I, JAMES BURNS, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Cash and Parcel Carriers, of which the following is a specification.

In the drawings, Figure 1 is a side elevation of a cash-carrier system embodying my improvements. Fig. 2 is an end view showing how the carriers are transferred from the incoming to the outgoing track. Fig. 3 is a side elevation taken in the line 1 1 of Fig. 2. Fig. 4 is a plan view taken in the line 2 2 of Fig. 3. Fig. 5 is a longitudinal section of the stop near the end of the incoming track to prevent the cars from running off until the transfer is ready to receive it. Fig. 6 is a vertical view of the spring by which the transfer is held against the end of the incoming track, taken in line 3 3 of Fig. 2. Fig. 7 is a front elevation of the governor which regulates the speed with which the deliverer descends, and a front elevation of such deliverer. Fig. 8 is a side elevation of the elevator just starting up, the carrier not being shown, and the stop down on the track to prevent the passage of another carrier. Fig. 9 is a side elevation of the deliverer. Fig. 10 is a cross section of the same, taken in the line 4 4 of Fig. 9. Fig. 11 is a perspective view of the prongs or arms of the deliverer by which the carrier is caught and carried down. Fig. 12 is a perspective view of the deliverer somewhat modified. Fig. 13 is a cross section of the same, taken in line 5 5 of Fig. 12. Fig. 14 is a perspective view of the elevator. Fig. 15 is a side elevation of the track, elevator, and carriage just as the carriage leaves the elevator. Fig. 16 is a side elevation of the track, carrier, and elevator, and guards to prevent the accidental falling of the carrier. Fig. 17 is a transverse section, taken in the line 6 6 of Fig. 16, showing the gates or guards to prevent the accidental falling of the carrier. Fig. 18 is a plan view of the main track and switch, with a carrier approaching the switch and just on the point of automatically swinging the pivoted section of the track into engagement with the switch. Fig. 19 is a plan view, partially in dotted lines, of the main track and the lateral flange on the carrier by which the pivoted section of the track is moved into engage-

ment with the switch (not shown) and the lateral inclined piece against which such lateral flange rubs to effect such engagement. Fig. 20 is a cross-section, taken in the line 7 7 of Fig. 18, showing the upper part of the carrier, the lateral flange, and the lateral piece above mentioned; and Fig. 21 is a view taken in line 8 8 of Fig. 18, showing the main track, the switch, and the yoke or bracket by which they are held in their proper relative positions.

In the drawings, A is the central station. B is the incoming track. C is the outgoing track. D is the transfer. E is the switch. F is the carrier. G is the elevator. H is the deliverer. I is the spring for holding the transfer in contact with the incoming track. J J are the governor-weights; K K, the governor-arms; L, a safety-guide for such arms. M are pivoted regulating-guides; N, a governor-plate, to which the upper ends of the guides M are connected; O, the governor-pulley; P, the governor-shaft; Q, a weight to counter-balance the deliverer; R, a stationary cross-bar on the rods up and down which the deliverer moves; S, a guard or stop to prevent the passage of the carrier while another carrier is being raised to the track; T, a lateral flange on the carrier to engage with a lateral inclined piece to effect the engaging of the track with the switch; U, such lateral inclined piece; V, a spring for holding the pivoted section of the track in engagement with the main track until forced out; W, arms or prongs on the deliverer, which catch the carrier and carry it down; X, an arm or piece on the elevator by which the carrier is caught and lifted; Y, gates or guards to prevent the carrier from accidentally falling while being lifted to the track; Z, a stop near the end of the incoming track to prevent the car from passing onto the transfer until the proper time.

a is a catch or stop on the outer end of the transfer, to prevent the car from running off such transfer until the proper time; b, a stop at the inner end of the outgoing track to prevent the car from leaving the central station until the proper time; c, a lever by which the guard b is raised; d, a lever by which the stop Z is raised; e, a bell-crank lever connecting the transfer D with the transfer-spring I; f,

a spring on the elevator, by which the carrier is held in proper position to engage with the track; *g*, an arm to prevent the carrier from rebounding when the delivery is made, as shown in Fig. 12; *h*, a spring by which the carrier is raised from the track; *i*, the piece on the deliverer by which it is suspended in position to engage with the outcoming carrier; *j*, a stop on the piece *i*, which engages with the cross-rod R until the trip *w*³ is loosened or disengaged; *k*, the yoke or bracket by which the track and switch are held in position; *l*, an inclined surface on the carrier, that engages with the track as the carrier is being lifted, and *i*; pushes the carrier into the proper position to engage the wheels with the track; *m*, the part of the carrier against which the spring *f* engages; *n*, lateral flanges on the carrier which rest on the piece X and the edge X' of the elevator to hold the carrier while being lifted; *o*, a loose stop on the lower end of the cord which passes over the pulley and connects with the stop S; and *p*, springs to close the gates or guards Y until opened by the upward passage of the carrier.

My present improvements relate, in general terms, to the cash and parcel carrier system described and claimed in the patents heretofore granted to me January 1, 1884, September 30, 1884, and December 23, 1884, and are the result of practical experience in the actual construction and operation of the inventions described and claimed in those patents. As there shown and described, I employ in my present improvement a track leading from the sales-counters to a central or common station, where the cashier and packers and wrappers are located, and an inclined track leading from such common station back to the sales-counters, so that the carrier, with the money and parcels sold, are forwarded by the clerks, the change made, and after deducting the price of the sales and packing and wrapping the articles sold, the balance due the customer, together with his purchase, are returned to the respective stations or counters from which they were forwarded; and my present improvements relate, in general terms, to the means for elevating the carriers to the track, preventing the passage of other carriers while one is being elevated, transferring them from the incoming to the outgoing track, switching them off at their respective stations, regulating the rapidity of their descent, and delivering them again to the sales-counters. In working out the means to accomplish these various objects a number of details are necessarily involved, which I will proceed to describe, and point out in my claims.

The carrier is constructed in many respects like that shown in my patents above referred to, and contains, in general terms, the necessary wheels to embrace the inclined tracks both above and below and to roll thereon, together with means for attaching and connecting the basket in which the parcels and cash are forwarded. The basket or receptacle is prefer-

ably pivoted to the lower end of the carrier-plate, which is mounted on the wheels so that it can swing or oscillate slightly both backward and forward and sidewise, so that as the carrier rolls down the track the position or action of the wheels on the track will not be disturbed or interfered with by the swinging or oscillation of the basket containing the parcels. This result may be effected by bending or turning the lower edge of the carrier-plate up somewhat, and pivoting the bail of the basket or receptacle in a piece which allows the bail to turn with the sidewise movement or swinging of the basket, which piece is then pivoted in the space formed by the upturning of the lower edge of the plate, as shown in Fig. 15. This piece can oscillate on its pivot to accommodate the forward and backward swinging of the basket as it passes down the line. Of course this two-way movement can be accomplished in other ways, and the gist of the invention here consists in pivoting the basket to the lower edge of the carrier-plate, so as to give it a movement coincident with the line of travel and across it. In other words, it consists in connecting the basket or receptacle and the carrier-plate together by a swivel or universal joint; and while I have described one method of connection, I do not wish to limit myself to precisely the means described, as I am well aware that it can be done by any of the well-known methods of making a swivel or universal joint.

The "carrier-plate," by which term I designate the plate containing the wheels, is preferably provided with lateral flanges *n*, (shown particularly in Figs. 15 and 16,) to facilitate the attachment of the carrier to the elevator by which it is lifted to the track. This elevator is a frame, marked G in the drawings, and particularly shown in Figs. 14 and 15. It is mounted on vertical rods attached to the counter and the ceiling of the store, up and down which it is adapted to be raised or lowered by means of a cord passing over a pulley, as particularly shown in Fig. 8.

At some distance above the counter I arrange guides or guards Y, as shown in Figs. 16 and 17. As shown in these figures, these guides are supported by rods attached to the vertical rods, up and down which the elevator moves at some distance above the track. The means by which they are supported in place may of course be varied and are in themselves unimportant so long as proper means for supporting the guides or guards in place are provided. These guides or guards are hinged at their outer sides, and extend across, or partially across, the track of the basket or receptacle as the carrier is being elevated into place on the track. They are openable upward only, and are preferably provided with springs *p p'*, to throw them back into place after the basket has been elevated, although they may be made of sufficient weight to fall into place from gravity. The inner edges of these guides are wide enough apart to permit the elevator to descend

while the guides are down, but are close enough together to prevent the basket or receptacle from falling through in case it or the carrier should become detached from the elevator or track in any way and start to fall down to the counter.

The elevator is provided with a supporting or retaining piece, X, Fig. 14, leaving a space between it and the edge X' of the elevator-frame, into which the carrier-plate may be inserted to be elevated. The lateral flanges *n* of the carrier-plate rest immediately above the piece X and the piece X' of the elevator-frame, so that the weight of the carrier will be received and sustained while it is being lifted. The upper portion of the elevator-frame is also provided with a spring, *f*, which contacts with the inner side of the carrier-plate, as at *m*, Fig. 20, and which serves to hold or press the carrier away from the frame. The other side of the carrier-plate is provided with a sloping surface, as at *l*, Fig. 20, which rubs or presses against the track as the carrier is lifted. The track forces the carrier-plate against the spring *f* until the track has passed below the edge of the upper wheels and reached the space between the upper and lower wheels, when the spring *f*, which has been compressed, forces the carrier laterally toward the track, which here being narrowed, as shown in Figs. 8 and 15, passes between the upper and lower wheels of the carrier in position to be embraced by them, and assumes the position shown at B, Fig. 20. The elevator is now permitted to drop, and the carrier, resting on the track, moves by the force of gravity toward the central station.

Immediately above the piece X' of the elevator-frame, preferably I arrange inclined starter-piece X², as shown in Fig. 14. While one of the lateral flanges *n* rests on the piece X', the inclined piece X² is above it. As the carrier is fitted to the track and the elevator begins to descend, the inclined piece X² will press against the top of the flange *n* and tend to push it down the track. In this way the weight of the elevator is caused, through this inclined piece, to bear upon the carrier and facilitate and expedite its departure down the track. The piece X terminates in a free end, as shown in Fig. 14, which is provided with a hollow notch or groove, X³, which fits over the handle or bail of the basket or package-receptacle, and as the piece X² ceases to operate, the groove X³ reaches the bail of the basket while starting on its journey, and continues the pressure and assists in the departure of the carrier.

To prevent another carrier from passing down the incoming track while a carrier is being elevated at any particular station, I provide a stop, S, to arrest their approach before reaching the station. This stop consists of a lever or rod pivoted at one end and provided with a buffer at the end stopping the cars. This buffer may be made in various ways; but I prefer to make it like that hereinafter de-

scribed with reference to the stop Z. The buffer end of this rod or lever is raised out of the track of the carriers by a cord attached to it passing up over a pulley and down to a loose stop, *o*. A portion of this cord is cut away and its place supplied with a spiral spring, as shown in Fig. 8. When the elevator-frame G is down in its normal position, it bears upon the stop *o*, pressing it down a short distance and far enough to raise the end of the stop S out of the way of the passing carriers; but when the elevator is being raised with a carrier to the track, the stop *o* is released and the weight of the buffer is sufficient to cause it to slide up the rod on which it is placed, allowing the buffer to fall into its position on the track, as shown in Fig. 8. The object of the spring is to relieve the cord of the strain that would be caused by a sudden drop of the elevator-frame upon the stop *o*, liable to occur through the carelessness of clerks. In this way the track is opened or closed automatically while the elevator is in its normal position or being raised to place a carrier on the track, and all danger of collision or accident to the carriers avoided.

As the carrier approaches the central station its progress will be arrested by the stop Z just before it reaches the end of the track. This stop, which is particularly shown in Fig. 3, consists of a lever pivoted over the track, or so that the buffer end will be over the track, as shown in the drawings. The buffer end is preferably made hollow, so as to inclose the end of the lever and to permit the insertion of a spring, as shown in Fig. 5, by which the shock of the carrier in striking will be greatly diminished and softened. After the carrier has been stopped the receiving-clerk can raise the buffer end of the lever by pressing downward on the handle *d*, which will release the carrier and permit it to roll down to the end of the track and onto the transfer. The stop Z, being allowed to fall into place, will arrest any other incoming carrier until the one already received has been forwarded on the outgoing track, when, by raising the buffer end of the lever, as before, another carrier will be admitted onto the transfer.

The transfer is a section of track mounted or sustained on a bell-crank lever. (Shown in Figs. 2 and 3.) The upper end of this crank enters a socket, receptacle, or barrel, (marked I in the drawings,) which contains a coiled spring, as particularly shown in Fig. 6, which tends to hold the transfer around and in contact with the end of the incoming track, so that when the stop Z is out of the way the incoming carrier will pass from the track onto the transfer. It is prevented from rolling off at the end of the transfer by a small dog or inclined stop, *a*, which is pivoted to the outer end of the transfer when the same is in contact with the incoming track, and held with its end or nose extending above the end of the track by a spring, as shown in Fig. 4. After the carrier has been admitted onto the trans-

fer, and its contents have been packed and wrapped and the proper change made, and after they have been returned to the carrier, the receiving clerk, by taking hold of the bell-crank, moves the transfer around until its outside end, when in contact with the incoming track, has been brought around into contact with the outgoing track, so that what was the outside end when in position with the incoming track becomes the inside end when in position with the outgoing track. As the end is brought into position against the end of the outgoing track, the dog or incline stop *a*, striking against the end of the track, is pushed aside out of the road, so that the end of the transfer and the end of the outgoing track are in the same plane, and ready to allow the carrier to start on its way back to the sales-counters. It is prevented from starting prematurely, however, by a stop, *b*, on the end of a pivoted lever, *c*, as shown in Fig. 2, which bars its progress. When it is ready to start back, the upper end of the pivoted lever *c* is brought down, by which the stop *b* is raised and the carrier started on its journey on the outgoing track, along which it rolls by the force of gravity until it reaches its appropriate station, when it is switched off and delivered, as hereinafter described.

The switch for conveying the carriers to their respective stations is shown in Figs. 18 and 19. It consists of a section of track leading from the station to within a short distance of the outgoing track, where it terminates, as shown in Fig. 18. It is connected with the main track and sustained in place by a U-shaped piece or bracket, *k*, Fig. 21, although other means may be employed for this purpose. A section of the outgoing track is pivoted at one end, and so that the free end will reach and coincide with the end of the branch or side track. When thus coinciding with the switch *E*, the pivoted portion of the outgoing track *C*, will be in the position indicated by dotted lines in Fig. 18. The free end of this pivoted section is held back in place and in connection with and coincident to the outgoing track *C* by a spring, *V*, (shown in Fig. 18,) until positively pushed out to form a connection with the switch-track. This positive displacement of the free end of the pivoted section is effected by the appropriate carrier. To accomplish this I fasten inclined pieces *U* at the side of the pivoted portion of the track at a certain distance therefrom. These inclined pieces *U* are intended to be placed at different distances from the pivoted portion of the track connecting with the side tracks leading to the different stations. The first one from the central station at the first switch is placed the greatest distance from the side of the pivoted portion of the track, the second one a little nearer to the track, the third still nearer, and each successive one still nearer, until the switch farthest from the central station is reached, where the piece *U* is closer to the track than any of the others. Each of the carriers is pro-

vided with a lateral flange, *T*, (shown in Figs. 18, 19, and 20,) on that side of the carrier-plate which may be seen on the opposite side of the track to the switch, and on the same side of the track on which the inclined pieces *U* are placed. These flanges are made of different widths, so that as they pass down the outgoing track the flange on each carrier will pass the inclined pieces *U* until it comes to its own appropriate station. For instance, the flange *T* on the carrier intended for the station farthest from the central station will have a flange *T* narrow enough to pass all of the inclined pieces *U* until it reaches that opposite the last switch.

As each carrier approaches its proper station, the flange *T* comes in contact with the inclined pieces *U*, and its momentum is sufficient to cause the flange *T* to slide down along the inclined pieces *U*. As the end of this inclined piece which is farthest from the central station is closer to the track than the other end, the flange on the carrier causes the free end of the pivoted section of the track to be crowded over, since the piece *U* is fixed and the pivoted section of the track movable. When the flange *T* crowds the pivoted section of track over to unite its free end with the end of the side track, the wheels of the carrier of course follow, and by the time they have reached the end of the switch it and the free end of the pivoted section of the track coincide, so that the carrier rolls onto and along the side track. The instant that the flange *T* has passed the inclined piece *U* the wheels have passed entirely onto the switch, so that the pivoted section of track can be and is drawn back by the spring *V* into its place of connection with the main outgoing track. The next carrier intended for that particular station repeats the operation above described, while those intended for stations farther on pass through without the flange *T* coming in contact with and rubbing against the inclined pieces *U*. If there be a great many different stations along the outgoing track, these inclined pieces *U* may be located at different heights as well as at different distances from the track. This will permit a carrier to be switched off at one station, while the next carrier, with its flange higher up or lower down on the carrier-plate, although of no greater width than the one that had just been switched off, would carry its flange over or under the inclined piece which had effected the switching of the preceding carrier, and roll on until a switch was reached where the inclined piece *U* was not only the proper distance from the track, but also in the right plane to be struck by the flange *T*. In this way and by these means any number of switches can be located on the outgoing track and any number of carriers employed without unduly increasing the width of the flange *T*, as would be the case were all of the flanges and all of the inclined pieces *U* arranged in the same plane.

After leaving the main track the carrier passes down the switch toward its particular

station. At the end of this switch is located the deliverer, which catches the carrier and lowers or delivers it to the salesman. This deliverer is a frame designated by the letter H, and mounted on two upright rods, so that it can slide up and down the same. It is provided, preferably, with two prongs or arms, W, extending in the direction of the approaching carrier, and standing at such position and height as that the carrier-plate, as the carrier rolls down to the end of the switch, will pass between the two prongs, with its lateral flange above them. As the end of the switch is reached and the wheels of the carrier roll off, so that the switch ceases to sustain the weight of the carrier, its weight will be received by the deliverer. The deliverer is sustained by a cord, as shown in Fig. 7, which passes up over a pulley, O², and around the governor-pulley O, whence the cord passes back over another pulley, O', and down to the weight Q, which it sustains and which counterbalances the deliverer H. This weight is sufficient to hold the deliverer in position ready to receive a carrier, but is insufficient to counterbalance the weight of the deliverer after it has received the carrier. When the carrier passes into the arms W of the deliverer, its added weight causes the deliverer H to descend and the weight Q to ascend until the deliverer has reached the counter and the carrier has been removed by the salesman, when the weight Q again causes the deliverer to rise into position to receive the next carrier which may present itself.

In Figs. 12 and 13 I have illustrated a modified form of the deliverer. In this deliverer I have the upright rods, the deliverer-frame moving up and down the same, and a prong or arm W, to engage the carrier and remove it from the track. In this deliverer, however, the arm W passes back and down and forward again through eyes or loops on the lower part of the deliverer-frame, so as to be pivotally connected therewith. It is connected by a spring, *h*, to the upper part of the deliverer-frame, for a purpose to be presently explained. On the prong W, and near the spring, is a loose thimble or sleeve, *w*. A piece, *i*, is pivotally connected with the upper portion of the deliverer-frame, and is provided with a latch or stop, *j*, which, when the deliverer is in position to receive a carrier, is hooked over the rod R, and assists in sustaining the weight of the deliverer. This pivoted piece *i* comes down, and is pivotally connected to the end of another piece, *i'*, which is connected at its other end through a slot to the arm W by a pin, *i*², which extends out from the arm W, through another slot in the thimble or sleeve *w*. A sleeve, *w'*, is located on one of the upright pieces of the deliverer-frame. This sleeve carries an arm, *g*, an arm, *g'*, and a brace, *g*², connecting them, as shown in Fig. 13. The arm *g'* is provided with a hole which extends over a pin, *w*², in the arm W, and serves to hold such arm out a certain distance

from the upright rods, and against the tension of the spring *h*. When the clerk prepares the deliverer to receive a carrier, he takes hold of the arm *g* with one hand and the arm W with the other, and pushes the arm W out against the tension of the spring *h* a sufficient distance to engage the hole in the arm *g'* over the pin *w*². He then allows the deliverer to rise into place until the catch *j* has engaged with the rod R. When the deliverer has been raised to this position, the arm W will be in the proper position to engage with a hole or hook on the carrier. The sleeve *w* rests against or nearly against a pivoted piece or lever, *w*³, pivoted on the arm W, as shown in Figs. 12 and 13. This piece is arranged so that when its end next to the sleeve *w* is pressed upon it will push the end of the arm *g* off of the pin *w*². As a carrier approaches, the hook on its carrier-plate will engage or encircle the arm W, and pass down the same until it contacts with the sleeve *w*, when it forces it back against the lever *w*³. This disengages the arm *g'* from the pin *w*², and permits the spring *h* to exert itself and lift the arm W, with the carrier, so as to remove the carrier from the track. As the sleeve *w* is pushed back, it moves the piece *i'*, which is pivotally connected with the piece *i*, so as to disengage the latch *j* from the rod R. As the arm *g'* is pushed back off of the pin *w*², the arm *g* is brought around behind the carrier, so as to prevent the carrier from rebounding and falling off the arm W. The spring having lifted the carrier from the track, and the latch being disengaged from the rod R, the whole sinks to the counter, when the arm is again set in position and the carrier removed and the deliverer allowed to rise into place for another carrier.

To prevent the deliverer from descending too rapidly when a carrier containing a heavy parcel is received, I employ the governor shown in Fig. 7. This governor is provided with a governor-pulley, O, mounted on a governor-shaft, P, provided at its lower end with guide-bars L for the governor-arms K, supporting the governor-weights J, which spread apart when the shaft is rotated, as indicated by dotted lines in Fig. 7, to the limits allowed by such guides. Farther up on the shaft are pivoted regulating-guides M, which encircle or embrace the governor-arms K, and in which they play as they are spread apart while revolving. The upper ends of these regulating-guides M pass through staples or loops on the under side of the plate N, by which they are attached to such plate. As the governor-arms spread apart they press against the lower ends of the regulating-guides M and raise them, correspondingly lowering the upper ends of such guides. As the upper ends are lowered they draw the plate N down and produce friction between it and the supporting-plate N', on which it rests. The faster the governor-shaft revolves the farther apart are spread the arms K, the more raised are the lower ends of the regulating-guides M, the more depressed

are their upper ends, and the more friction is produced. In this way when the carrier with a heavy package passes onto the deliverer H, its too rapid descent is prevented. As it starts to descend rapidly, the governor-pulley and governor-weights are revolved, friction is produced, and the rapid descent of the package avoided. On the other hand, a lighter package revolves the governor-weights more slowly and produces less friction between the plate N and its supporting-pieces. In this way either a light or a heavy package can be carried down on the deliverer automatically and the rapidity of its descent properly regulated.

What I regard as new, and desire to secure by Letters Patent, is—

1. In a cash and parcel carrier apparatus, an elevator-frame provided with a supporting or retaining piece close to and substantially parallel with the front side of the frame, in combination with a carrier having a thin carrier-plate adapted to be inserted, while the carrier is being elevated, between the supporting or sustaining piece and the front of the elevator-frame, substantially as described.

2. In a cash and parcel carrier apparatus, an elevator-frame provided with a supporting or retaining piece having a notch or groove in its free end, in combination with a carrier having a carrier-plate adapted to be inserted, while the carrier is being elevated, between the supporting or retaining piece and the elevator-frame, and so arranged that the notch or groove in the free end of the supporting or sustaining piece will press upon the bail of the parcel, basket, or receptacle as it starts on its journey, substantially as described.

3. In a cash and parcel carrier apparatus, an elevator-frame provided with a fixed inclined starter-piece, in combination with a carrier having a carrier-plate provided with a lateral flange arranged so that the inclined starter-piece will press upon such flange as the elevator begins to descend and assist and facilitate the carrier to start on its journey, substantially as described.

4. In a cash and parcel carrier apparatus, the combination of a carrier, a carrier-plate having a lateral flange, and a stationary inclined piece arranged at the side of the main line and opposite a pivoted section thereof, against which the lateral flange rubs in passing, whereby the free end of such pivoted section is forced out of connection with the main line, substantially as described.

5. In a cash and parcel carrier apparatus, a carrier provided with a carrier-plate having a lateral flange, in combination with a stationary inclined piece arranged at the side of the main track opposite a pivoted section thereof, and such pivoted section, whereby the free end of such pivoted section will be automatically forced out of connection with the main line and brought into connection with a switch or branch, substantially as described.

6. In a cash and parcel carrier apparatus, a main track or way provided with a pivoted

section, in combination with a branch and a stationary inclined piece arranged at the side of the main track and opposite such pivoted section and adapted to be struck by the lateral flange of a passing carrier, whereby the free end of such pivoted section will be automatically disengaged from the main line and connected with the branch, substantially as described.

7. In a cash and parcel carrier apparatus, the combination of a transfer, a bell-crank lever on which it is mounted, and incoming and outgoing tracks against which its ends respectively contact in transferring carriers from the incoming to the outgoing tracks, substantially as described.

8. In a cash and parcel carrier apparatus, the combination of a transfer, incoming and outgoing tracks against which its ends respectively contact in transferring carriers from the incoming to the outgoing track, and a spring for holding the transfer in its normal position in contact with the incoming track, substantially as described.

9. In a cash and parcel carrier apparatus, a transfer for transferring the carriers from an incoming to an outgoing track provided with an inclined pivoted dog or stop, *a*, at its outer end to prevent the incoming carrier from running off, substantially as described.

10. In a cash and parcel carrier apparatus, the combination of the elevating-rods, hinged gates or guards openable upward only, and a parcel basket or receptacle adapted to open such guards while being elevated, substantially as described.

11. In a cash and parcel carrier apparatus, the combination of the elevating-rods, hinged gates or guards openable upward only, springs to hold such gates down until positively raised, and a parcel basket or receptacle adapted to open such guards while being elevated, substantially as described.

12. In a cash and parcel carrier apparatus, a governor comprising a governor pulley and shaft, governor-weights, governor-arms, pivotally connected to the shaft near their upper ends, regulating-guards pivotally connected to the shaft and encircling and embracing at their lower ends the governor-arms, a governor-plate connected to the upper ends of such regulating-guards, the governor weights and arms being capable of separation at their lower ends by the rotation of the governor pulley and shaft, whereby the lower ends of the regulating-guards are forced outward and upward and the governor-plate drawn downward into frictional contact with its supporting-plate, all combined substantially as described.

13. In a cash and parcel carrier apparatus, a deliverer, H, a pulley, O', a pulley, O², and a governor-pulley, O, the deliverer being connected to the weight by a suitable rope or cord passing over the pulleys O' O², and the governor-pulley, in combination with a governor-shaft, governor-weights, governor-arms

pivotally connected to the shaft near their upper ends and supporting such governor-weights, regulating-guards pivotally connected to the shaft and encircling and embracing at their lower end the governor-arms, a governor-plate connected to the upper ends of the regulating-guards, the governor weights and arms being capable of separation at their ends by the rotation of the governor pulley and shaft, whereby the lower ends of the regulating-guards are forced outward and upward and the governor-plate drawn downward into frictional contact with its supporting-plate, substantially as described.

14. In a cash and parcel carrier apparatus, the combination of a stop, S, a cord attached thereto and passing over a pulley, a loose button, o, mounted on one of the elevating rods, and to which the lower end of the cord is attached, and an elevator movable up and down the elevating-rods, adapted to hold the loose button down when in its normal position and to allow it to rise when released, whereby the buffer is removed from the track while the elevator is down and allowed to fall into position to stop the passage of a carrier while the elevator is being raised, substantially as described.

15. In a cash and parcel carrier apparatus, the combination of a deliverer comprising a frame which may be moved up and down vertical guiding-rods, an arm or prong to engage with its appropriate carrier pivotally connected with the deliverer-frame, a pivoted lever engaging with a pin on such arm or

prong to hold it in proper position to engage with the carrier, and a spring which raises the arm or prong and lifts the carrier from the track when such pivoted lever is disengaged from the pin on such arm or prong, substantially as described.

16. In a cash and parcel carrier apparatus, the combination of a deliverer comprising a frame which may be moved up and down vertical guiding-rods, a rod connecting such vertical guide-pieces at a point above the way or track, an arm or prong to engage with its appropriate carrier pivotally connected with the deliverer-frame, a pivoted lever engaging with a pin on such arm or prong to hold it in proper position to engage with the carrier, and a spring which raises the arm or prong and lifts the carrier from the track when such pivoted lever is disengaged from the pin on such arm or prong, and a pivoted piece, i, pivoted to the upper frame of the deliverer and provided with a catch, j, which engages with the rod R, and sustains the weight of the deliverer when up, pivotally connected at its lower end with the forward end of another piece, i', which piece is in turn connected at its other end with the arm or prong whereby the catch j is disengaged from the rod R as the arm or prong is raised by the spring h, permitting the deliverer to drop to the counter, substantially as described.

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Witnesses:

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