C. S. JENNINGS.

DESPATCH OR CONVEYER SYSTEM.

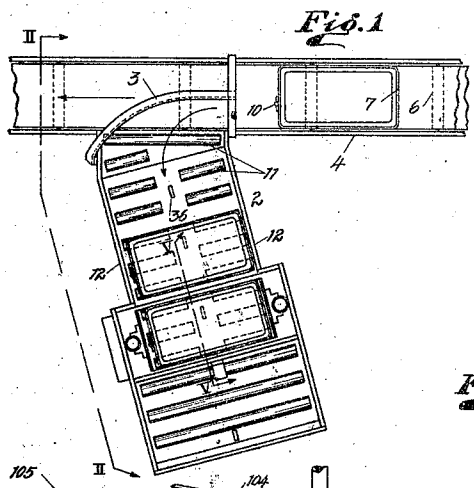
APPLICATION FILED FEB. 27, 1913.

1,143,829.

Patented June 22, 1915.

2 SHEETS—SHEET 1.

Fig. 1



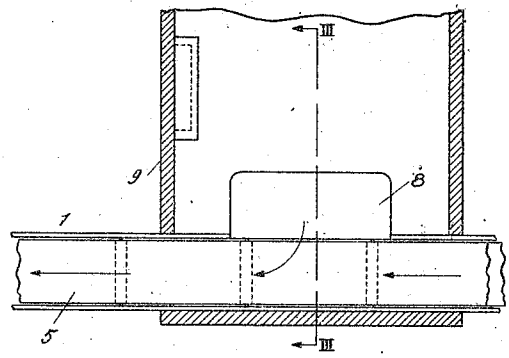


Fig. 2

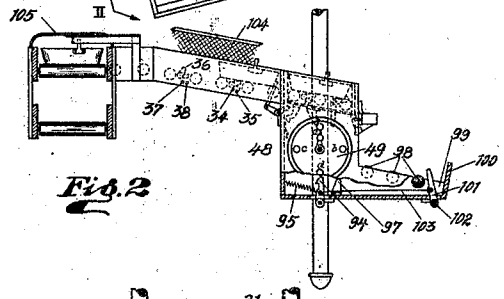


Fig. 3

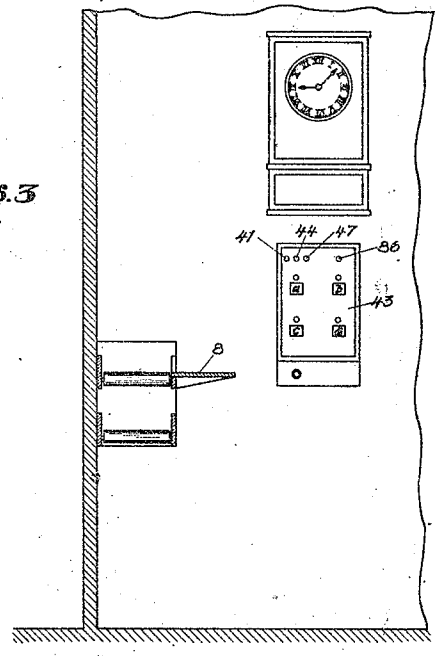


Fig. 4

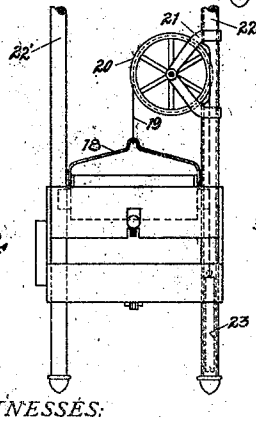
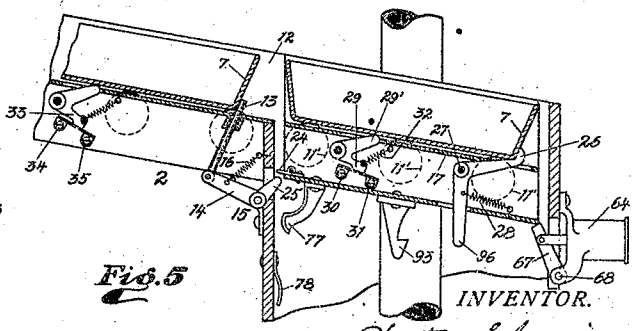


Fig. 5



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2 SHEETS—SHEET 2.

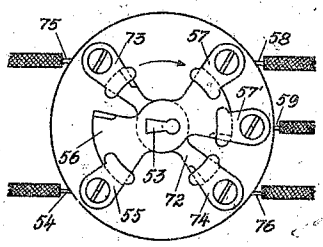


Fig. 7

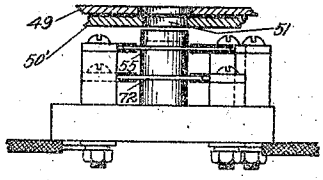


Fig. 8

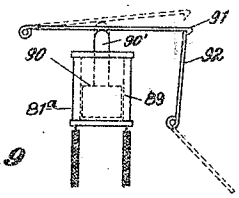
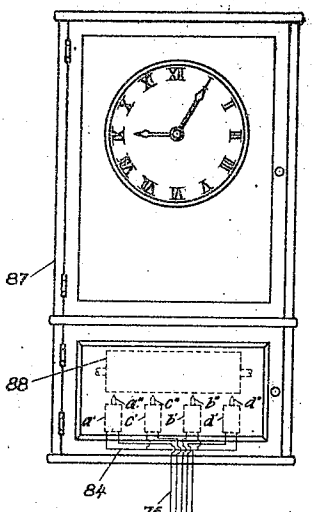


Fig. 9



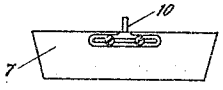


Fig. 10

Fig. 6

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UNITED STATES PATENT OFFICE.

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DESPATCH OR CONVEYER SYSTEM.

1,143,829. Specification of Letters Patent. Patented June 22, 1915.

Application filed February 27, 1913. Serial No. 750,941.

To all whom it may concern:

Be it known that I, CHESTER S. JENNINGS, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Despatch or Conveyer Systems, of which the following is a specification.

This invention relates to despatch or conveyer systems and has for one of its principal objects the provision of means in connection with a suitable conveying apparatus for insuring the delivery of valuable material, *e. g.*, paper for bonds, bills and the like, jewelry, etc., from a determined place or station to a definite person and to no other.

My invention further contemplates the provision of means for recording or indicating successively the advance of the material toward the point to which it is despatched and indeed to preferably permit the sender to control this movement by stopping the material *en route* at a convenient point or points and rendering its further advance subject or partly subject to the control of the sender, although the latter may be located at a relatively considerable distance from such a stopping point.

These and other objects of my invention will be hereafter referred to and the novel combinations of elements whereby they may be attained will be more particularly pointed out in the appending claims.

I am aware that various changes, omissions, substitutions and modifications may be made in the apparatus or system herein described by way of exemplification without departing from the spirit of my invention and I hence desire to be limited only by the scope of said claims.

Referring to the drawings, which form a part hereof and in which like reference characters designate like parts through the several views, I have shown my signaling, recording and control features as applied to a tray conveyer system, to which they are especially well adapted.

In the drawings: Figure 1 is a plan view of a portion of the main line of a tray conveyer, showing one of the switches thereof, a branch leading therefrom, and a tray delivering apparatus, the operation of which affords the requisite control of the despatched material, by the sender. Fig. 2 is a vertical section taken on line II—II of Fig. 1. Fig. 3 is a section taken on line III—III of Fig. 1. Fig. 4 is a detail front elevation of said delivery apparatus. Fig. 5 is a vertical detail section of said apparatus taken on line V—V of Fig. 1. Fig. 6 is a wiring diagram of the signaling, recording and certain of the control elements of the system. Fig. 7 is a detail of a key operated switch. Fig. 8 is a side elevation of the same. Fig. 9 is a detail of a solenoid operated annunciator used in the apparatus shown by way of exemplification. Fig. 10 is an end view of a tray with its deflecting pin in position thereon.

The tray conveyer proper preferably comprises a main section 1 and a plurality of branch sections 2; but for convenience of illustration, only one such branch section has been shown, together with the switch 3 which delivers the trays thereto. In the conveyer, the main section 1 consists of a framework 4, a belt 5, rolls 6 which support said belt in a known manner, and other parts not shown which are commonly used for driving such a conveyer.

The tray carrying portion of the belt is driven in the direction of the arrows indicated thereon and the framework includes provisions for guiding the trays 7 as the latter move outwardly from the sending shelf or station 8. This station in the present instance is inclosed, as by means of walls 9, so as to prevent access thereto by unauthorized persons. Each tray may be provided with a suitable bracket carrying a pin or lug 10 adapted for engagement with the particular switch which is to shift such tray from the main line on to the branch line or section for which the tray is destined. The pin 10 may either be fixedly disposed upon each tray, in which case said tray will substantially invariably be shunted off toward a corresponding delivery mechanism, or said pin may obviously be made adjustable laterally with respect to the tray so that the pin may be set to deliver the tray to any station desired. In the construction shown, the pin 10 of the tray 7 will engage the switch 3 upon the left hand side thereof, facing in the direction in which the tray is traveling, and

the front end of the tray will be swung around by the arcuately shaped switching element until the tray leaves the belt 5 and rolls down the slightly inclined branch section 2; the latter preferably being provided with a plurality of rolls 11 and lateral guides 12.

It will be noted that the tray advances through the branch section substantially at right angles to its previous course of travel and that it ultimately comes to rest upon the outer extremity of this section; the forward side of the tray abutting against a movable stop or pin 13. The pin 13 is pivotally connected to the arm 14 of a bell crank, broadly designated 15: and is normally held in its tray obstructing position by means of a spring 16, or the like. When the pin 13 is drawn down, out of the path of the trays, in the manner hereinafter described, the tray, which would otherwise move into or remain in engagement with said pin, is free to roll by gravity from the branch section on to a lowering platform 17. This platform may also be provided with rollers 11′ to facilitate the emplacement of the tray in proper position thereon and its subsequent removal therefrom, by gravity. The platform 17 is preferably supported by a bail 18 to which is secured one end of a wire rope 19, or the like, as shown in Fig. 3. This rope is passed around a pulley 20 carried by a bracket 21 which is secured to one of a pair of, in this case, pendant standards 22—22′. Within the standard 22, which is simply a tube of large diameter, is disposed a suitable counter-weight 23. When the platform or support 17 is unloaded and is not otherwise held or latched in its lower position, in the manner hereinafter described, the counter-weight 23 will elevate and hold the platform 17 in the position in which it is shown in Fig. 4. As the platform 17 is thus in the act of being raised by its counter-weight, a pivoted trip 24 carried upon the rear, lower edge thereof, engages the short arm 25 of the crank 15 above referred to and rocks said crank counter-clockwise as viewed in Fig. 4, whereby to withdraw the pin 13 from the path of the tray 7 which is in engagement therewith; leaving the tray free to descend by gravity on to the surface of the platform 17.

A stop 26 pivoted at 27 to the side walls of the tray or platform 17 is held in its tray obstructing position through the instrumentality of a spring 28 and the descending tray engages this stop and is thereby held against further downward and lateral displacement until the stop is moved out of the way in the manner hereinafter described. The branch 2 in the apparatus given by way of exemplification, is of sufficient length to provide space for two trays in addition to the one which has thus passed on to the platform 17. Suitable contact devices are provided at spaced intervals along the length of the branch section and upon the tray or platform 17, whereby to close certain circuits to notify the operator stationed at the sending shelf 8 of the arrival of the trays, the first upon platform 17—the second in the position indicated by the tray immediately there-behind, as viewed in Figs. 1 and 4, and the third in the space, shown as unoccupied in Fig. 1, immediately to the rear of the second tray. The first tray, by its movement down on to the platform 17, moves the platform carried contact, designated 29, into bridging engagement with contacts 30 and 31, whereby to close circuit across said last mentioned contacts. This bridge contact is normally held out of engagement with contacts 30 and 31 by means of a light spring 32; but the upwardly projecting actuating finger or arm 29′ of said contact, by reason of its engagement with the bottom of the tray, swings the contact 29 into engagement with contacts 30 and 31, in manner aforesaid. In like fashion, a second and similar set of contacts 33—34—35 are brought into operative relationship by the downward and lateral movement of the second tray which is held against further downward movement by the pin 13. Similarly, when the third tray, shown in Fig. 1 as advancing toward the switch, moves down onto the vacant portion of the branch 2, the third bridge contact 36 will be actuated and will close the circuit between contacts 37 and 38. Referring now to Fig. 6, these several sets of contacts have been diagrammatically indicated in the upper left hand portion of said figure and, upon the closure of the circuit across 37—38, current flows from the positive lead 39 to the wire 40, through the signal light or lamp 41 and thence to the negative lead, 42. The lamp 41, together with certain other signaling devices, hereinafter referred to, is mounted upon a board 43, located adjacent the sending shelf 8. The lighting up of lamp 41 accordingly, notifies the operator stationed at the sending shelf that a tray has passed or is in contact with the actuating arm of the bridge 36. Similarly, as said tray moves down so that it closes contact across 34 and 35, a second light 44 is energized, current flowing from 39 to 34, 33 and 35, to a wire 45, through the lamp 44 and thence out to the negative lead 42. When a tray is in place upon the platform 17, current flows from 39 through contacts 30, 29 and 31, wire 46, lamp 47, and thence to the lead 42, above referred to. If lamp 47 be lighted, the sender knows that a tray is in position upon the delivering platform 17 and ordinarily it will be his duty to forward two additional trays to this station so that there need be no loss of time should more than one workman

desire to obtain a tray full of material at this point or station. Accordingly, when lamp 41 goes out, the sender is made aware thereby, of the necessity for forwarding a tray to this station and the re-lighting of said lamp 41 together with lamps 44 and 47 serves to advise him that the proper number of filled trays is located at the station.

Upon the side of the tray-delivering apparatus, broadly designated 48 and of which the platform 17 forms an important element, is disposed an apertured dial 49, or the like, preferably similar in its general appearance to the dials of time clocks used for recording the ingress and egress of workmen to a plant. For convenience of illustration, the dial shown by way of exemplification is adapted for use by four individuals or persons. In other words, we shall assume that there are four operatives who are stationed adjacent the delivering apparatus 48 and who receive their supplies of material from this apparatus. Each of these operatives may be given a letter, or other designating symbol, and let us assume that *a* desires material. He accordingly swings the pointer 50 so that it is directed toward the proper lock cylinder or key switch which a key in his possession is adapted to actuate. Each man in the establishment will be provided with a key which is different from that in the possession of any other workman so that he, and he alone, will be able to operate a particular switch. The pointer 50 is attached to a plate 50′ below the dial 49, and plate 50′ has but one aperture 51 therein which may, however, be brought into registry, by means of the pointer, with any one of the apertures 52 in the disk 49. The foregoing provision prevents more than one operative inserting his key in the switch at any one time.

As shown in Fig. 6 one of the key switches is shown in its inoperative position and, hence, no current is flowing therethrough. When, however, a key fitting this particular switch is inserted into the keyhole 53 and said key is rotated through 90° until the keyhole is disposed as shown in Fig. 7, the switch parts become operative to close the following circuits. Current flows from lead 39, through wire 54, to the switch contact 55, across the blade 56 to contacts 57 and 57′. The former of these is connected to a wire 58 and the latter to a wire 59. Current is, at such time, free to flow through wire 58 to and through a lamp 60 and wire 61 which, in turn, delivers to the negative lead 42. The energization of lamp 60 gives notice to the attendant stationed adjacent the sending shelf that the workman who is designated *a* desires material. Thereupon he presses the button 62 which allows current to flow from contact 57′, through wire 59 to wire 63. Said current then passes through an electro-magnetic device 64, wire 65 and contacts controlled by the button 62, and through a wire 66, to the negative lead 42.

The device 64, just referred to, may comprise a solenoid or the like which operates a latch or movable stop 67. The latter is pivoted at 68 to a portion of a casing of the apparatus 64 and its free extremity is normally disposed in such position as to hinder a downward movement of the platform 17 when a tray 7 is delivered thereupon; such downward movement being otherwise possible owing to the fact that the counterweight 23 is, at such time, overbalanced. The operation of the device 64, hence, withdraws the latch 67 from the path of the platform, and the latter, together with the tray carried thereupon, descends by gravity. I particularly desire to direct attention, however, to the fact that the sender cannot so cause a tray to descend after it has been delivered to the platform 17, until one of the four workmen, who obtain material from this delivering apparatus, has indicated his desire for the delivery of a tray full of material by inserting his key into the proper lock cylinder. Correspondingly, if workman *b* desires material, upon the insertion of his key into the proper keyhole, and the rotation thereof in like fashion, lamp 69 will be lighted and a pressure of button 62 will, thereupon, suffice to effect the delivery of the next tray.

As the several circuits controlled by keys *a*, *b*, *c* and *d* are all substantially the same, it has been thought unnecessary to trace each and every one through in detail. Suffice it to say, therefore, that lamp 60 is controlled, in the manner aforesaid, from key switch *a*; lamp 69 from key switch *b*; lamp 70 from key switch *c*; and lamp 71 from key switch *d*. The key switch, as indicated in Fig. 2, comprises two blades, an upper blade 55, above referred to, and a second or lower blade 72. When the switch is operatively disposed by its key, in the manner above described, the lower blade 72 will, at such time, connect a pair of contacts 73—74, respectively connected to wires 75 and 76. The platform 17 carries upon its under surface a contact 77 which is adapted for engagement with a spring contact 78 and, hence, when the platform is descending it momentarily permits current to flow from lead 39 through a wire 79, to said contact 78; thence through contact 77 to a wire 80, which latter is in each case in electrical connection with the wire of each key switch which corresponds to wire 75 of the key switch *a*, to wit, wire 75ᵇ of switch *b*, etc. Since at such time, contacts 73 and 74 of, let us say, switch *a* are in electrical communication, said current will flow through wire 76 to a point 81′ whereat the circuit is

branched and a portion of said current flows through an electro-magnetically operated annunciator 81^a which may bear the letter or other designating symbol which corresponds to the key switch which has been operated. The current flows from the annunciator 81^a to a wire 82 which leads to a wire 83. The other portion of the current in this branched circuit, continues to traverse the wire 76 from point 81′ and passes through an electro-magnetically operated marking or recording apparatus designated a'. This passage of current energizes said device and causes the elevation of a pencil, needle or other suitable marking or impressing device a''; the current thereafter passing through a wire 84 to a common return wire 85 which unites with the wire 83 above referred to, and the current flowing from both of these wires, passes through a signal lamp 86 and from thence out through the negative lead 42.

The electro-magnetic apparatus a' and the apparatus b', c' and d' which are correspondingly actuated by descent of the platform when a given key switch b, c, or d has been turned, is preferably inclosed within the bottom of a time clock 87. Within this clock is a suitable mechanism, not shown, for rotating a roll 88 upon which may be placed a lined paper, tape or strip, or other suitable medium adapted for recording purposes, said strip or roll being steadily moved by the clockwork in a well known manner in consonance with the clock mechanism proper. It has not been thought necessary to go into details of construction of such an apparatus as they are in common use. Suffice it to say that a mechanism of this description is admirably adapted for use in connection with my system and it is believed that a sufficient showing thereof has been made to render its use readily apparent to those skilled in the art. The momentary energization of the circuit just described causes the needle or pencil a'' to be lifted into engagement with the paper or roll 88 so that the time that the workman, whose designating symbol is a, obtains a tray full of material is definitely and accurately recorded. Furthermore the number of trays which each and every workman obtains in the course of a day and the period within which such material is consumed or used up is quite definitely indicated upon the roll or paper strip, since one of the mechanisms a', b', etc., corresponds to each of the switches a, b, etc. Lamp 86 will light every time that contact 77 passes contact 78 when the platform is descending, and this will serve to direct the attention of the operative stationed at the sending shelf to the fact that material is being properly delivered to one of the workmen who obtains material from the delivering apparatus which corresponds to board 43; while the drop of the annunciator flap serves to inform the sender just which workman is obtaining the material and confirms the previous lighting of the particular lamp 60—69, etc., which corresponds to the workman.

The preferred construction of annunciator has been diagrammatically indicated in Fig. 9 where the annunciator 81^a, for example, comprises a solenoid 89, the core 90 of which may be elevated to thereby lift an extension 90′ of said core, which in turn raises a latch 91 which holds the flap 92 in its upper position. When, therefore, solenoid 89 is energized, flap 92 is unlatched and drops by gravity exposing the letter or symbol thereupon or therebehind, in a known manner. After the sender has made note of the fact that workman a, for example, is obtaining material, he reëlevates the flap 92 which will thereupon be reëngaged by the latch 91 only to be released when this same workman again obtains a tray of material. As the several circuits which operate the respective annunciator drops are all substantially the same as that just described, it has not been thought necessary to describe each in detail. Suffice it to say that current flows in each case from wire 80 through the particular switch element or blade 72 involved, and thence through the wire leading from each key switch which corresponds to wire 76 just described. A portion of such current, thereupon, effects the actuation of the corresponding indicator drop 81^a, 81^b, 81^c or 81^d, while another portion of the current energizes the corresponding apparatus a', b', c', d'. Thus, of 88 be a slip of paper which is steadily advanced over the needles a'', b'', etc., and which paper has thereon marks corresponding to the time of day at which the marked portions of the paper pass over said needles, the descent of the platform 17 will cause the paper to be perforated in the portion thereof which corresponds to a given operative or workman and the line of the paper will indicate just what time such workman obtained his material.

The under side of the platform 17 carries a hook 93 which is adapted for engagement with a latch 94; the latter being normally held in its latching position by means of a spring 95 as indicated in Fig. 2. When the platform 17 is in its lowermost position, the latch 94 is normally in engagement with the hook 93 so that even after a tray 7 has been removed from this platform, said platform cannot rise under the action of its counterweight 23 until latch 94 has been moved to its unlatching position.

The stop 26, previously mentioned, is provided with a depending arm 96 which is swung clockwise, as viewed in Figs. 2 and 4, by a stationary cam 97 as the tray-bearing platform moves to its lowermost position.

This releases the tray carried by said platform from said stop and said tray is thereafter free to roll out and down, by gravity, on to the rollers 98 journaled in the forwardly projecting portion 99 of the tray delivering apparatus 48. The tray comes to rest against a suitable stop 100, but while doing so swings a lever 101, pivoted at 102 to the under side of the extension 99, to the right; lever 101 is connected by means of a link 103 with the said latch 94; so that the moment that the tray has substantially come to rest at a point where the operative or workman may have access thereto, the now unloaded platform will be released and its counter-weight 23 will thereupon immediately effect the re-ascension of said platform to a position where it may receive the next succeeding tray. In so ascending, the short arm 25 of the bell crank 15 will again be engaged by the pivoted trip 24 to move the pin 13 out of the path of such succeeding tray, in the manner above described. It may be here noted also that when the platform 17 is descending this trip 24 cannot operatively engage the arm 25, by reason of its pivotal mounting. The member 24 of course has a bias for the position in which it is shown in Fig. 5.

As indicated in Fig. 2, the tray-conveying apparatus may be completely covered at substantially all points thereof by wire netting 104, or the like, so that unauthorized persons can not gain access to the material in transit. For convenience I append herewith a resumé of the operation of the device as a whole. Assuming the conveyers to be at rest and that the operatives are about to start for the day. The belt conveyers are started and the attendant in the issuing room *e. g.*, at or adjacent the sending shelf 8, places trays on the belt for each delivery station to which it is desired to send trays. The trays are automatically switched off on to the branch sections which lead to the respective delivering stations. As a tray slides into position on the lowering platform it closes the circuit which energizes the signal lamp 47 (having previously, of course, momentarily, energized lamps 41 and 44) which indicates to the sender in the issuing room that a tray is in position and ready for delivery. The second tray to be delivered to this station is similarly switched from the belt and takes up a position just outside of the tray lowering mechanism. This second tray, correspondingly, causes the energization of lamp 44. Finally, the third tray which is to be delivered to this station, similarly, is shunted off from the main conveyer and causes lamp 41 to light up substantially as the third tray moves into engagement with the one immediately in advance.

Let us assume that the material is being used by pressmen and that one of these workmen now desires material. He rotates the pointer 50 toward the key-switch which bears his number or letter and thereupon inserts his key and rotates said switch. Lamp 60, which can hence light up for this workman and for no other, indicates to the sending operative that pressman *a* desires material. He thereupon presses button 62 which effects the release of the platform; the latter descends and as it does so, closes circuit across 77—78 and records a mark or punch upon the clockwork driven roll or strip 88, at a point thereon which corresponds to this particular workman, while at the same time the annunciator drop 81ª becomes operative. The platform descends to its lowermost position and automatically the latch or stop which holds the tray in place thereon, is withdrawn from its operative position and said tray rolls, by gravity, down on to the delivery shelf. As the tray comes to rest upon this shelf it releases the platform which, being underbalanced, promptly ascends. It will be noted that when the platform is not in its up position, signal lamp 86 will be lighted. As the trays are successively delivered on to the delivery shelf, the several signal lamps 41, 44 and 47 successively go out and the operative in the issuing room notes a delivery of these trays and despatches others to take their place. In general, it will be seen that the entire system is so devised that no single workman or operative can unaidedly obtain a tray full of material from the sending station or shelf and that not even the operative stationed at this point can deliver a tray full of material to any point where access may be had thereto; without the assistance of the workman stationed at or adjacent this point. Furthermore, it will be noted that such action on the part of one of the operatives stationed at this point will be recorded in such a manner as to indicate just what operative did so order the delivery of the material and the time at which the delivery was made.

It is believed that the system renders the delivery of material from a given sending station to some particular point or station, practically proof against fraud or connivance without such connivance speedily becoming apparent. The system is hence particularly adapted for use in banks, mints, large jewelry establishments and other places where valuable material must be handled by a number of workmen and the system does away with the necessity for any personal delivery, by hand, of such material to any given workman. It is obvious too, that the system adapts itself to very large establishments where a considerable number of delivering stations are provided such, for example, as that indicated; each of these stations, if desired, delivering

material to any desired number of operatives.

Having thus described my invention what I claim is:—

1. In a delivery system, a plurality of stations including a sending station and a delivering station, means for conveying material from the first toward the second station, provisions for preventing access to said material while in transit, and co-acting means, jointly controlled from a plurality of said stations and inoperative from a single one of said stations alone, for affording access to said material at said delivering station.

2. In a delivery system, a plurality of stations including a sending station and a delivering station, the latter adapted to serve a plurality of operatives, means for conveying material from the ending toward the delivering station, provisions for preventing access to said material while in transit, and co-acting means, having portions thereof disposed at and jointly controlled from said delivering station and from one other of said plurality of stations and inoperative from either of said two last mentioned stations alone, for affording access to said material at said delivering station, said system further comprising means for rendering evident when said co-acting means is so operated, which of said plurality of operatives actuated the portion of said co-acting means disposed at said delivering station.

3. In a delivery system, a sending station and a delivering station, means for conveying material from said sending station to said delivering station, means for stopping said material while in transit, and co-acting means requiring joint operation from said sending and delivering station for controlling the advance thereafter of the so stopped material, toward a delivery point at said delivering station.

4. In a delivery system, a sending station, a delivering station, a plurality of trays, a conveyer for transmitting said trays from said sending station toward said delivering station, means for stopping the advance of said trays, means for rendering evident the stoppage of said trays to a person at said sending station, and means controlled jointly from both of said stations for controlling the advance thereafter of the so stopped material toward a delivery point at said delivering station.

5. In a delivery system, a sending station, a delivering station, a plurality of receptacles, means for transmitting said receptacles from said sending station generally toward said delivering station, means for diverting a receptacle from the path in which it has been traveling substantially directly toward said station, means for checking the onward progress of the so diverted receptacle, an actuating part disposed at said sending station, an actuating part disposed at said delivery station, and connections between said two last mentioned parts for jointly controlling the continued advance of the material the progress of which has been checked.

6. In a delivery system, a sending station, a delivering station, a plurality of receptacles, means, including a gravity conveyer, for transmitting said receptacles from said sending station toward said delivering station, means for stopping the advance of said receptacles, and means controlled jointly and non-severally from both of said stations for controlling the advance thereafter of the so stopped receptacles toward a delivery point at said delivering station.

7. In a delivery system, a sending station, a delivering station, a plurality of receptacles, means for transmitting said receptacles from said sending station toward said delivering station, means for stopping the advance of said receptacle, and means controlled jointly and non-severally from both of said stations for controlling the advance thereafter of the so stopped receptacles toward a delivery point at said delivering station.

8. In a delivery system, a delivering station, a conveying apparatus for delivering material thereto, said apparatus provided, however, with means for preventing inadvertent delivery of said material at said station, and means, jointly controlled and only jointly controlled from a plurality of relatively remote points, for controlling said delivery of material to said station.

9. In a delivery system, a delivering station, a conveying apparatus for delivering material thereto, said apparatus comprising a plurality of trays into which said material may be placed and provided with means for preventing inadvertent delivery of said trays at said station, and means, of necessity jointly controlled from a plurality of relatively remote points, for controlling the delivery of said trays at said station.

10. In a delivery system, a delivering station, a conveying apparatus for delivering material thereto, said apparatus comprising a plurality of trays into which said material may be placed and provided with means for preventing inadvertent delivery of said trays at said station, and means, of necessity jointly controlled from said station and from a point relatively remote therefrom, for controlling the delivery of said trays at said station.

11. In a delivery system, the combination of a sending station and a conveyer having switching parts and branch sections leading from said parts, with a plurality of receptacles, one of said branch sections adapted to accommodate a plurality of said receptacles,

means for indicating the presence of receptacles in said last mentioned branch section, means for delivering receptacles one at a time from said branch section, and means for controlling said delivering means in part from said sending station and in part from a point adjacent said delivering means.

12. In a delivery system, the combination of a conveyer, a delivering apparatus adapted to receive material from said conveyer, and means for controlling said apparatus jointly, and jointly only, from two relatively widely separated points.

13. In a delivery system, the combination of a conveyer, a delivering apparatus comprising a platform movable substantially at right angles to the line of travel of said conveyer, said platform adapted to receive but a limited quantity of material from said conveyer at any one time, and means for controlling said apparatus jointly, and jointly only, from two spaced points for delivering said material from said platform as desired by operatives stationed at said points.

14. In a delivery system, the combination of a conveyer, a delivering apparatus comprising a reciprocably mounted platform adapted to receive but a limited quantity of material from said conveyer at any one time, and means for controlling said apparatus jointly, and jointly only, from two spaced points for delivering said material from said platform as desired by operatives stationed at said points.

15. In a delivery system, the combination of a tray conveyer, a delivering apparatus comprising a platform adapted for the reception of trays from said conveyer, means for preventing the passage of trays from said conveyer to said platform when the latter is in other than its tray receiving position, said platform having a bias for one position when loaded and having a bias for a second position when unloaded, and means for controlling movements of said platform.

16. In a delivery system, the combination of a tray conveyer, a delivering apparatus comprising a platform adapted for the reception of trays from said conveyer, means for preventing the passage of trays from said conveyer to said platform when the latter is in other than its tray receiving position, said platform having a bias for one position when loaded and having a bias for a second position when unloaded, and automatic means for causing said platform to unload when in said first position.

17. In a delivery system, the combination of a tray conveyer, a delivering apparatus comprising a platform adapted for the reception of trays from said conveyer, means for preventing the passage of trays from said conveyer to said platform when the latter is in other than its tray receiving position, said platform having a bias for one position when loaded and having a bias for a second position when unloaded, means for causing said platform to unload when in said first position, means for holding said platform in said first position when moved thereinto, and means, actuable by said unloading operation, for releasing said platform.

18. In a delivery system, the combination of a tray conveyer, a delivering apparatus comprising a platform adapted for the reception of trays from said conveyer, means substantially independent of the conveyer for controlling the delivery of trays from said platform, and means for recording the time of the delivery of trays by said apparatus.

19. In a delivery system, the combination of a tray conveyer, a delivering apparatus adapted to receive trays from said conveyer, means for controlling said delivering apparatus, said means comprising a plurality of individual mechanisms each normally operable by but one of a plurality of persons receiving trays from said apparatus, and means, co-acting with the particular one of said mechanisms which may have been actuated by one of said persons, for rendering evident at a determined place, the delivery of a tray to such particular person.

20. In a delivery system, the combination of a tray conveyer, a delivering apparatus adapted to receive trays from said conveyer, means for controlling said delivering apparatus, said means comprising a plurality of individual mechanisms each normally operable by but one of a plurality of persons receiving trays from said apparatus, and means, co-acting with the particular one of said mechanisms which may have been actuated by one of said persons, for recording the delivery of a tray to such particular person and the time of such delivery.

21. In a delivery system, the combination of a tray conveyer, a delivering apparatus adapted to receive trays from said conveyer, means for controlling said delivering apparatus, said means comprising a plurality of individual mechanisms each normally operable by but one of a plurality of persons receiving trays from said apparatus, means co-acting with the particular one of said mechanisms which may have been actuated by one of said persons, for rendering evident at a determined place, the delivery of a tray to such particular person, and means for preventing more than one of said mechanisms being actuated at any one time.

22. In a delivery system, the combination of a conveyer, a delivering apparatus adapted to receive material from said conveyer, and means for controlling said apparatus jointly, and jointly only, from a plurality of relatively widely separated points.

23. In a delivery system, the combination of a conveyer, means for delivering material therefrom, electrical means for controlling said delivering means jointly, and jointly only, from a plurality of spaced controlling points, and electrical connections between said points and said delivering means.

In testimony whereof I have affixed my signature in the presence of two witnesses.

CHESTER S. JENNINGS.

Witnesses:
L. C. BUTLER,
M. KOCH.