

Oct. 12, 1937.

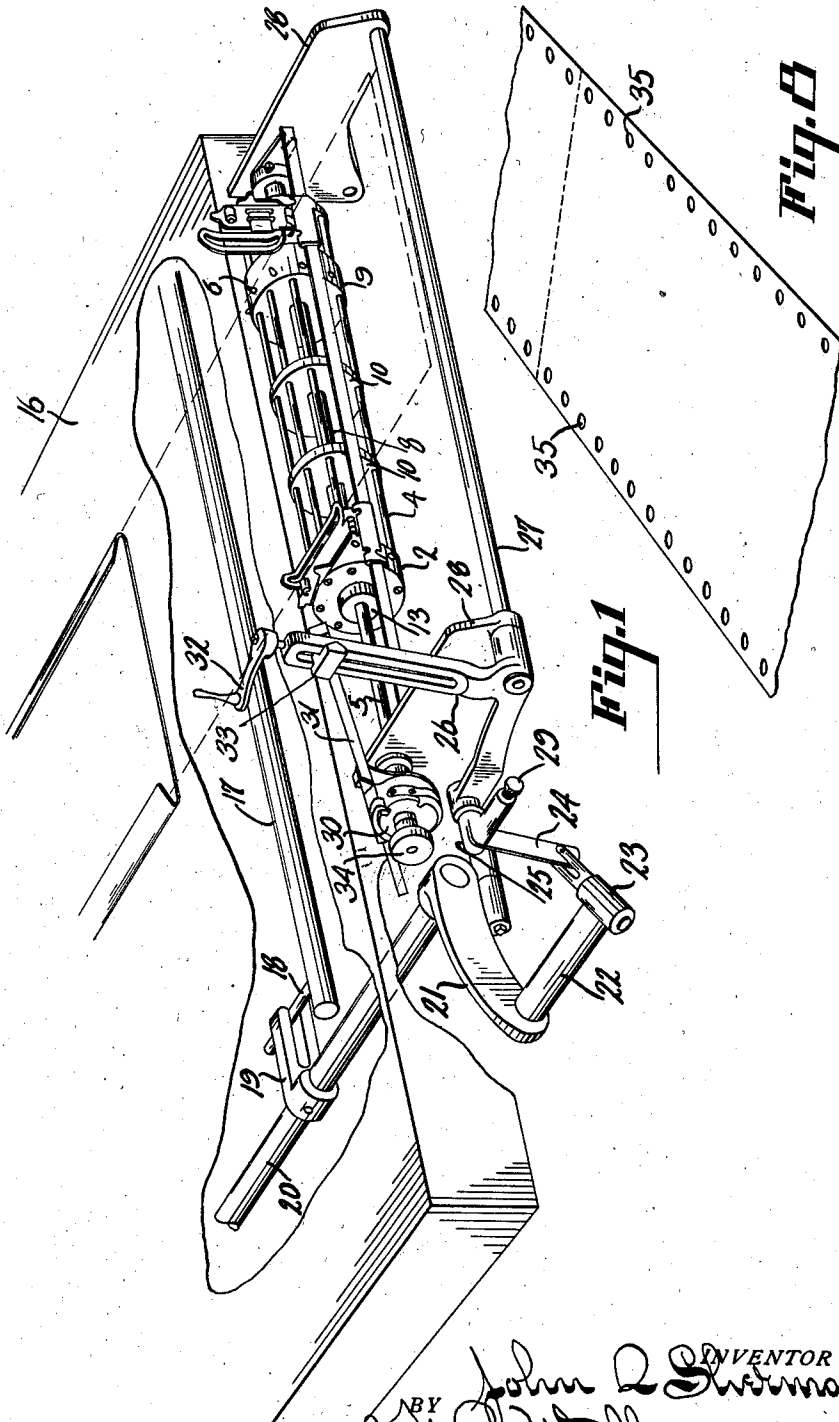
J. Q. SHERMAN

2,095,293

PIN TYPE FEEDING DEVICE

Filed Dec. 18, 1936

3 Sheets-Sheet 1



INVENTOR
John Q. Sherman
BY
J. H. Walker
ATTORNEY

Oct. 12, 1937.

J. Q. SHERMAN

2,095,293

PIN TYPE FEEDING DEVICE

Filed Dec. 18, 1936

3 Sheets-Sheet 2

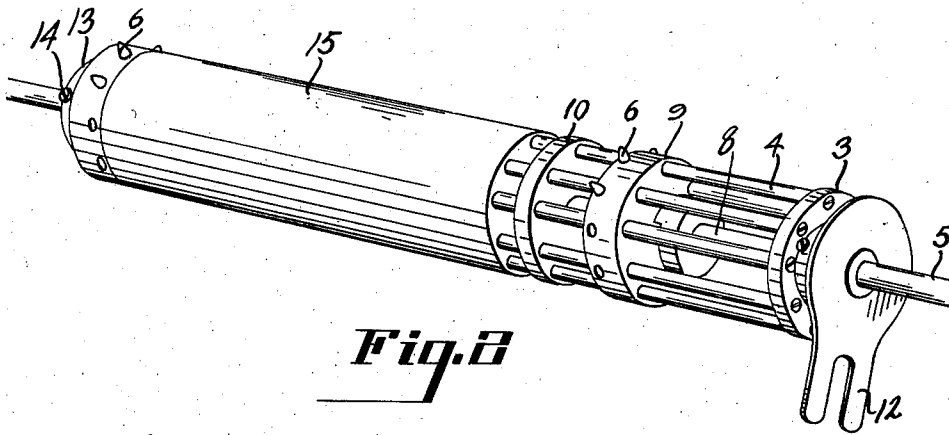


Fig. 2

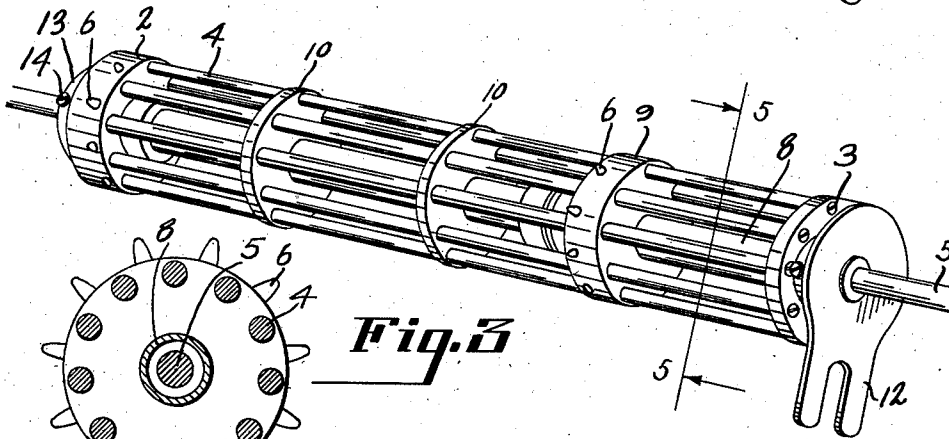


Fig. 3

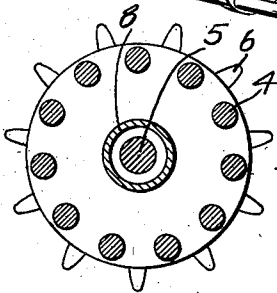


Fig. 7

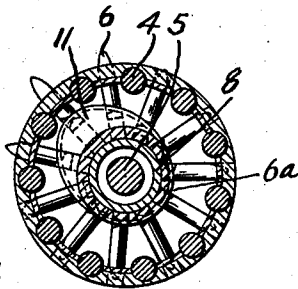


Fig. 4

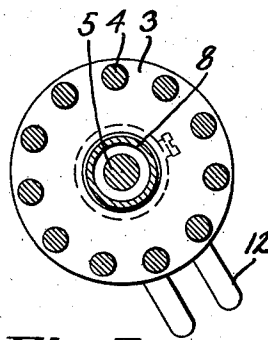


Fig. 6

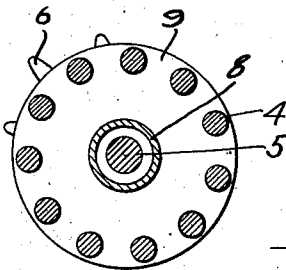


Fig. 5

INVENTOR
J. Q. Sherman
BY J. L. Walker ATTORNEY

Oct. 12, 1937.

J. Q. SHERMAN

2,095,293

PIN TYPE FEEDING DEVICE

Filed Dec. 18, 1936

3 Sheets-Sheet 3

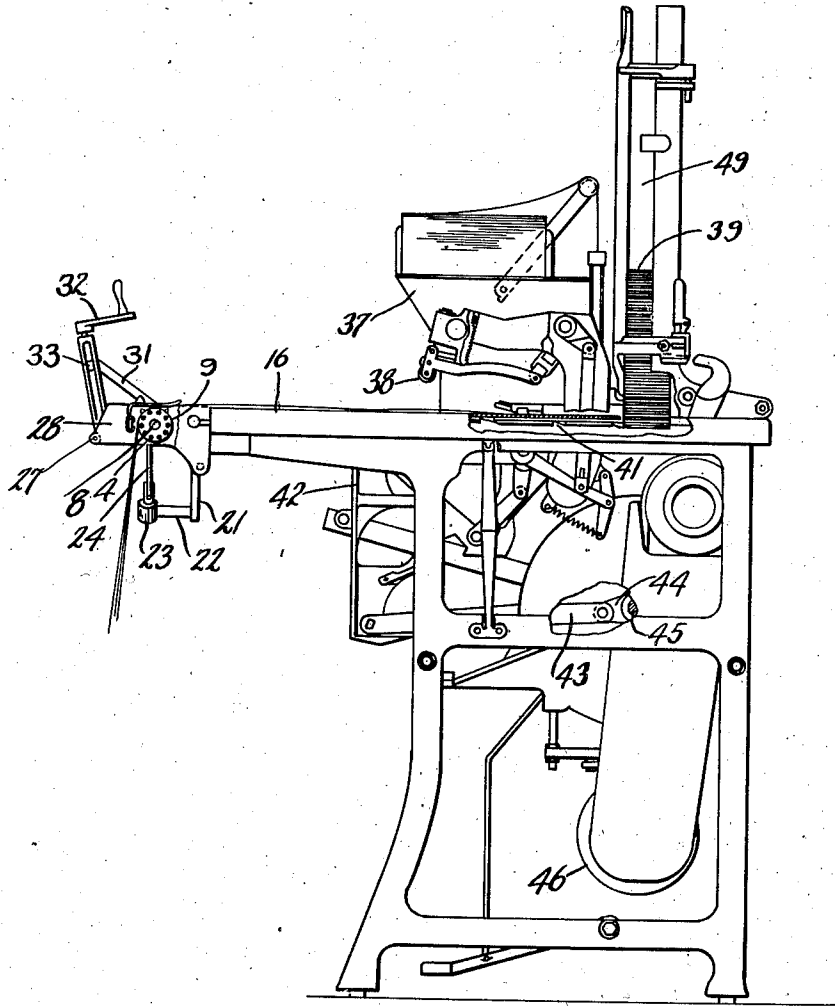


Fig. 9

INVENTOR
J. Q. Sherman
BY J. L. Walker ATTORNEY

UNITED STATES PATENT OFFICE

2,095,293

PIN TYPE FEEDING DEVICE

John Q. Sherman, Dayton, Ohio

Application December 18, 1936, Serial No. 116,553

29 Claims. (Cl. 101—57)

This invention pertains to strip feeding means for writing, recording and imprinting machines and the like and comprises an adjustable pin type feeding roller for universal use with marginally punched strips of material of different widths.

In feeding relatively wide strips of paper or other flexible material by means engageable only with the margins thereof it is quite desirable to provide supporting means for the material intermediate the points of engagement of the feeding means. The present construction is designed to afford such support while permitting the feeding devices to be relatively adjusted to accommodate material of different widths.

The object of the invention is to provide a pin type feeding device which may not only be economically manufactured but which will be efficient in use, uniform in operation, accurate in its feeding action, of few parts and unlikely to get out of repair.

A further and important object of the invention is to provide improved means for supporting the material being fed adjacent the points of engagement of the feeding means therewith.

A further object of the invention is the provision of means for enabling the relative adjustment of the feeding means while maintaining constant relation therewith of the material supporting means.

A further object of the invention is to provide an improved form of pin type roller engageable in marginally punched holes in the strip of material to be fed.

A further object of the invention is to provide an improved form of pin type roller adaptable to strips of material of different widths.

A further object of the invention is the provision of improved strip supporting means.

A further object of the invention is to provide a skeleton type of pin type feeding roll.

With the above primary and other incidental objects in view, as will more fully appear in the specification, the invention consists of the features of construction, the parts and combinations thereof, and the mode of operation, or their equivalents, as hereinafter described and set forth in the claims.

In the drawings wherein is shown the preferred but not necessarily the only form of embodiment of the invention,

Fig. 1 is a perspective view of a portion of a strip operating mechanism with a feed roller forming the subject matter hereof associated with intermittent actuating means therefor.

Fig. 2 is a perspective view of a combined platen and pin type feeding roller embodying the present invention.

Fig. 3 is a perspective view of a modification wherein the present adjustable pin type feeding features are combined with a platen roll.

Figs. 5 and 6 are transverse sectional views on line 5—5 of Fig. 3 viewed in opposite directions.

Fig. 4 is a transverse sectional view through one of the pin wheel members illustrating the means for effecting progressive retraction and extension of the feeding pins.

Fig. 7 is a side view of a feeding unit having fixed material engaging pins.

Fig. 8 illustrates a portion of a marginally punched strip to be fed. Fig. 9 is a side elevation of a conventional imprinting apparatus to which for illustrative purpose the present feeding device is applied.

Like parts are indicated by similar characters of reference throughout the several views.

The pin type feeding roller forming the subject matter hereof has a wide application for feeding strip material in association with various types of apparatus. The present application is a continuation in part of copending application Serial No. 683,612, filed August 4, 1933, wherein the present pin type feeding roller is illustrated as attached to a conventional "Addressograph" machine.

The adjustable feeding devices and correlated strip supporting means may be incorporated in a combined platen and feeding roll as illustrated in Fig. 2 or may comprise strip feeding structure wholly apart from the platen roll feature as is shown in Fig. 1.

The radially projecting feeding pins which are engageable in marginally punched holes in the strip material may be fixedly mounted in their supporting heads or they may be mounted for reciprocatory movement in radial directions whereby they are progressively projected beyond the periphery of the carrying unit or roll as they approach the path of travel of the marginally punched material with which they engage to advance the material a limited distance and are then automatically withdrawn progressively from engagement therewith to positions wholly within the periphery of the rotary carrying member, in unison with the rotation of the pin carrying unit or roll.

Such construction, per se, forms no part of the present invention but is fully set forth and claimed in United States Letters Patent to Sherman, Nos. 2,000,649; 2,000,650; and 2,000,651, dated May 7th, 1935.

The skeleton or cage-like construction, shown in Figs. 1 and 3 comprises spaced relatively fixed heads 2 and 3, interconnected with each other at circumferentially spaced intervals by a circular series of longitudinal rods 4. This cage-like skeleton structure is mounted upon a supporting and driving shaft 5.

In the drawings, the head 2 is shown provided with reciprocatory disappearing feed pins 6. Mounted upon the circumferentially spaced lon-

itudinal rods 4 and axially adjustable thereon and upon a concentric sleeve 8 surrounding the shaft 5, is a second pin wheel unit 9 also carrying a group of reciprocatory disappearing feed pins 6. The feeding units 2 and 9 are relatively adjustable in an axial direction by movement of the latter toward and from the former upon the supporting rods 4 and sleeve 8 into agreement with marginal feeding holes in the material strip to be fed. Located intermediate the pin wheel units 2 and 9 are discs 10 also axially adjustable to and fro upon the rod 4 and sleeve 8 in spaced relation with each other and with the pin type feeding units 2 and 9. These discs 10 serve to support the marginally punched material being fed intermediate the points of engagement with the feeding units.

For illustrative purposes, there is shown in Fig. 4 a transverse section through one of the pin type feeding units wherein the rotary carrier member is provided with a plurality of radial grooves or guides in which the pins 6 are located for reciprocatory movement.

Interiorly of the rotary carrier element there is stationarily mounted an eccentric cam 11. The reciprocatory pins 6 are provided adjacent to their inner ends with lateral notches 6a which engage over a marginal flange upon the cam 11 about which they are carried by rotation of the carrier member. The progressive travel of the pins 6 about the eccentric cam member 11 causes the pins to be successively projected beyond the periphery of the carrying member and thereafter retracted wholly thereinto. The eccentric cam 11 is so positioned that the position at which the pins are extended beyond the periphery of the carrying member will be substantially coincident with the path of travel of the marginally punched material to be fed.

The control cams 11 within the pin type units 2 and 9 are secured to the sleeve 8 which in turn is provided with a bifurcated arm 12 by which the concentric sleeve 8 and pin control cams 11 carried thereby are held stationarily while the group of mounting rods 4 and the pin carrying heads 2 and 9 and the intermediate supporting discs 10 rotate relative thereto. To effect such rotation, the pin wheel unit 2 is provided with a hub 13 secured to the shaft 5 by a set screw 14. Thus the pin wheel units, together with the assembly of rods 4 and discs 10 rotate as a single unit, carrying therewith the pins 6 of the respective heads 2 and 9 which are caused to travel about their corresponding control cams 11 which are held stationarily by the sleeve 8 and arm 12.

In Fig. 2 there is shown a modification wherein a pin carrying platen roll 15 and the skeleton feed roll are combined in a single unit. In this construction, a portion of the roll comprises a platen 15 having at one end thereof the pin carrying head 2. Projecting from the opposite end of the platen section 15 is the series of circumferentially spaced mounting rods 4 carrying at their extremities the mounting head 3. Slidingly adjustable upon the rods 4 intermediate the terminal head 3 and the platen section 15 is a pin wheel unit 9 axially adjustable toward and from the platen roll section 15 to accommodate marginally punched material of different widths. Intermediate the pin wheel unit 9 and the platen roll section 15 is a supporting disc 10 also axially adjustable as before described for supporting the portion of the strip of material beyond the end of the platen roll.

While disappearing pins, as heretofore de-

scribed, are quite desirable for certain conditions of use, they are not, however, essential for operation of the present apparatus and the radial feeding pins 6 may be fixedly mounted in their respective carrying heads as is shown in Fig. 6.

The adjustable pin type roller forming the subject matter hereof is applicable to a wide variety of operating mechanism for uniformly advancing a strip of material either continuously or intermittently past an operating position.

For illustrative purposes but with no intent to limit the scope or application of the invention, it is shown in Fig. 1 mounted upon the edge of a table 16 over which a strip of series punched material is to be advanced. The actuating mechanism shown is adapted to impart to the pin type feeding roller successive rotations induced by a rock shaft 17 beneath the table 16 which may be actuated by the operation of the imprinting or any other associated power mechanism.

A rock arm 18 upon the actuating shaft 17 engages in a bifurcated arm 19 upon a second rock shaft 20 projecting beyond the margin of the table 16 where it carries an arm 21 supporting a stud 22 having at its extremity a swivel head 23. A link 24 connects the swivel head 23 with a second swivel head 25 upon one arm of a bell crank lever 26 carried by a rock shaft 27 mounted in suitable brackets 28.

The link 24 is detachably connected with the bell crank lever 26 by a retractable spring plunger 29. The swivel heads 23 and 25 accommodate the interconnecting link 24 to the differential rocking movement of the arms 21 and 26 in transverse planes.

For transforming rocking motion of the bell crank lever into rotary motion of the strip feeding roll there is provided upon the roll shaft 5 beyond the supporting bracket 28 a pawl and ratchet mechanism 30 actuated by a reciprocatory rack bar 31 variably connected with the bell crank lever 26 for adjustment toward and from its fulcrum. As the lever rocks in one direction it actuates the rack bar and ratchet mechanism idly, but upon the return motion it causes the pin type feeding roller to be rotated in unison with such return motion. A screw stem controlled by a crank handle 32 on the extremity of the bell crank lever serves to adjust the connection 33 of the rack bar 31 with the bell crank lever toward and from the center of oscillation of the latter to thereby vary the stroke of the reciprocatory rack bar and correspondingly transmit at each operation a greater or less rotary motion to the feeding roller. Thus the feeding movement of the roller may be increased or diminished at will, thus enabling the strip to be accurately advanced thereby through predetermined successive travel movements.

A knob 33 upon the roller shaft 5 enables manual adjustment of the roller as may be necessary. As the roller is turned, the feed pins 6 progressively engage series spaced holes 35 in the strip 36 to draw the strip over the table 16. The table 16 shown in Fig. 1 is a portion of an "Addressograph" imprinting apparatus, which is more fully illustrated and described in the parent application, Serial No. 683,612, to which reference is made, and of which the present is a continuation in part. As therein shown and described, the brackets 28 are detachable from the table, and the feeding mechanism forming the subject matter hereof comprises a unitary attachment, which may be applied and removed at will.

It is to be understood that the present feeding

device is applicable to a wide range of mechanisms wherein a continuous strip of material is to be fed past an operating position, including various forms of imprinting and recording apparatus, computing, tabulating and billing machines, typewriters and the like and that the association with a conventional "Addressograph" machine as herein shown and described is for illustrative purposes. Such apparatus includes a support 37 for a supply packet of strip material from which the strip is drawn past an imprinting position intermediate an oscillatory presser member or platen 38 and a type plate 39 which has been fed to imprinting position from a magazine 40 by a reciprocatory conveyor 41 beneath the table 16 carried by a slide frame 42 connected by a pitman 43 with an actuating crank 44 on a shaft 45 which is driven by the motor 46. The type plates 39 are automatically advanced one at a time to cooperative relation with the movable platen 38 and after being impressed against the paper by the movable platen 38 they are discharged into a receiving compartment beneath the table.

From the above description it will be apparent that there is thus provided a device of the character described possessing the particular features of advantage before enumerated as desirable, but which obviously is susceptible of modification in its form, proportions, detail construction and arrangement of parts without departing from the principle involved or sacrificing any of its advantages.

While in order to comply with the statute, the invention has been described in language more or less specific as to structural features, it is to be understood that the invention is not limited to the specific features shown, but that the means and construction herein disclosed comprise the preferred form of several modes of putting the invention into effect, and that the invention is therefore claimed in any of its forms or modifications within the legitimate and valid scope of the appended claims.

Having thus described my invention, I claim:

1. In a strip feeding device, a skeleton roll including concentric axially spaced pin wheel units engageable progressively in series punched holes in a strip to be fed, a plurality of parallel spaced rods extending intermediate the pin wheels in concentric series, and a spacer member interconnecting the plurality of rods intermediate the pin wheel units.

2. In a strip feeding device, a skeleton roll including concentrically disposed pin wheel units, relatively adjustable toward and from each other, and progressively engageable in series punched holes in a strip to be fed, a plurality of parallel spaced rods extending intermediate the pin wheel units, at least one of the units having spaced holes therein through which the rods extend, such pin wheel unit being slidable to and fro on said rods.

3. In a strip feeding device, a skeleton roll including concentrically disposed pin wheel units relatively adjustable toward and from each other and progressively engageable in series punched holes in a strip to be fed, a feed shaft to which said pin wheel units are operatively and adjustably connected and a series of parallel spaced rods between the pin wheel units to prevent sagging therebetween of the strip to be fed.

4. In a strip feeding device, a skeleton roll including concentrically disposed pin wheel units relatively adjustable toward and from each other,

a plurality of parallel spaced rods extending intermediate the pin wheel units, at least one of the pin wheel units being axially adjustable relative to the rods.

5. A strip treating apparatus relative to which a strip to be treated is progressively advanced including motion transmitting means, characterized by a pin type feeding device the pins of which are progressively engageable in a succession of longitudinally spaced holes in the strip, located in offset relation to the apparatus in the direction of travel of the strip, a plurality of relatively spaced rods disposed transversely to the path of travel of the strip upon which the pin type feeding device is mounted for to and fro lateral adjustment into agreement with the succession of holes, and an operative connection between the pin type feeding device and the motion transmitting means of the strip treating apparatus for intermittently actuating the pin type feeding device by actuation of said apparatus.

6. In a pin type feeding apparatus for series punched material a pair of relatively spaced pin wheels mounted for axial adjustment one toward the other, a material supporting disc interposed between the pin wheels and supporting means therefor on which the pin wheels and discs are mounted for unison rotation and for axial adjustment relative thereto.

7. In a pin type feeding apparatus for series punched material, a plurality of concentrically disposed relatively spaced pin wheels and material supporting discs arranged in spaced relation for unison rotation and common mounting means therefor on which the pin wheels and discs are axially adjustable.

8. In a pin type feeding device for marginally punched material a plurality of concentrically disposed rotary pin wheels and a plurality of rotary discs disposed in concentric spaced relation with the pin wheels and common supporting means upon which the pin wheels and discs are carried for unison rotation.

9. In a pin type feeding apparatus for series punched material, a pair of relatively spaced concentric pin wheels and a circular series of spaced rods extending from one pin wheel to the other and rotating in unison with the pin wheels.

10. In a strip feeding apparatus a pin type feeding device including a traveling series of feeding pins following a circuitous path of travel and progressively engageable in a succession of longitudinally spaced holes in a strip of material to be fed and a plurality of parallel spaced rods within the orbit of the traveling pins upon which the pin type feeding device is slidably adjustable into different strip feeding positions.

11. In a strip feeding apparatus a pin type feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally spaced holes in a strip of material to be fed, and mounting means therefor including a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions.

12. In a strip feeding and imprinting apparatus wherein an impression receiving strip is progressively advanced past an imprinting position at which it receives successive different legends predetermined by a plurality of individual legend determining members automatically advanced seriatim from a source of supply into operative position and having motion transmitting means, characterized by a pin type feeding device mount-

ed in offset relation with said imprinting apparatus and including a traveling series of feeding pins progressively engageable in a succession of longitudinally spaced holes in a strip to be fed, a mounting frame therefor comprising relatively
 5 fixed spaced heads and a plurality of parallel spaced rods interconnecting the heads upon which the pin type feeding device is mounted for to and fro sliding adjustment toward and from
 10 the respective heads to accommodate the feeding device to strips of material having their successions of longitudinally spaced holes differently positioned transversely of the apparatus, and an operating means for actuating the traveling pins
 15 by the motion transmitting means of the apparatus.

13. An attachment for a strip treating apparatus including a detachably mounted frame comprising terminal heads and a plurality of parallel
 20 spaced rods interconnecting the heads, a series of traveling feeding pins progressively engageable in a succession of longitudinally spaced holes in a strip of material for advancing the strip past an operating position of the strip treating apparatus,
 25 mounting means for the pins transfixed by said rods and adjustable thereon to present the pins in different strip engaging positions, one of said rods being revoluble and serving as a driving shaft for actuating the traveling pins, and means
 30 for rotating the said revoluble rod in synchronism with the operation of the strip treating apparatus.

14. In a structure of the character described, a frame including a plurality of parallel spaced rods, spaced terminal heads interconnected by the
 35 rods and a pin type feeding device mounted on said rods for to and fro sliding adjustment between the heads, and beyond which the spaced rods extend, a rotary shaft having operative driving engagement with the pin type feeding device
 40 in any one of its several positions of adjustment and means for transmitting rotary motion to the shaft.

15. In a strip feeding apparatus, a pair of spaced pin type feeding devices including traveling
 45 series of pins engageable in longitudinally spaced holes in a strip to be fed, a series of parallel spaced rods extending intermediate the pin type feeding devices substantially from one such feeding device to the other for supporting the
 50 strip being fed adjacent to the point of engagement of the feeding means therewith, and means for transmitting travel motion to the feeding pins.

16. In a strip feeding apparatus, a pair of spaced pin type feeding devices including traveling
 55 series of pins engageable in longitudinally spaced holes in a strip to be fed, a revoluble circular series of parallel spaced rods extending intermediate the pin type feeding devices from one such device to the other and rotatable in unison
 60 with the travel motion of the pins for supporting the strip being fed adjacent to the point of engagement of the feeding means therewith, and actuating means for rotating the series of rods in unison with the travel motion of the pins.

17. In a strip feeding apparatus, a pin type feeding device including a series of traveling pins
 65 engageable in longitudinally spaced holes in a strip to be fed, a series of parallel spaced rods extending through the pin type feeding device and on opposite sides thereof upon which the pin type feeding device is mounted for lateral adjustment into agreement with longitudinally
 70 spaced holes of different strips, a drive shaft for the pin type feeding device, and means for ro-

tating the shaft to transmit travel motion to the feeding pins.

18. In a strip feeding apparatus, a pin type feeding device including a series of traveling pins
 5 engageable in longitudinally spaced holes in a strip to be fed, a revoluble circular series of parallel spaced rods extending through the feeding device and on opposite sides thereof for supporting the strip being fed adjacent to the point of engagement of the feeding means therewith, and
 10 actuating means for rotating the series of rods in unison with the travel motion of the pins.

19. In a strip feeding device a pair of laterally spaced pin type feeding devices relatively adjustable toward and from each other and progressively engageable in series punched holes in a
 15 strip to be fed, a feed shaft with which said pin type feeding devices are operatively and adjustably connected, and a revoluble series of parallel spaced rods extending between the pin type feeding
 20 devices and traveling in unison therewith to prevent sagging therebetween of the strip to be fed.

20. A strip feeding apparatus wherein a continuous record strip having therein a succession
 25 of spaced feed holes is advanced past an imprinting position of an apparatus having a movable platen and coating imprinting means characterized by a pin type feeding device located in offset relation with the imprinting means and
 30 movable platen in the direction of travel of the strip, and mounting means for the pin type feeding means including a plurality of parallel spaced rods disposed transversely of the path of travel of the strip upon which the pin type feeding
 35 device is laterally adjustable to accommodate different record strips and interconnecting operating means for actuating the pin type feeding device in synchronism with the movable platen.

21. A strip feeding attachment for an imprinting apparatus wherein a record strip having
 40 therein a succession of longitudinally spaced feed holes is progressively advanced past a movable platen and coating imprinting means of said apparatus to receive successive impressions thereon, characterized by a pin type feeding device
 45 detachably mounted in offset relation with the movable platen and coating imprinting means, a plurality of parallel spaced rods disposed transversely of the path of travel of the strip upon
 50 which the pin type feeding device is laterally adjustable, one of said rods comprising an actuating shaft therefor having driving engagement with the pin type feeding device in various positions of adjustment thereof and operatively connected
 55 with the imprinting apparatus for actuating in synchronism therewith.

22. In a strip feeding and imprinting apparatus wherein a continuous strip of impression receiving material is progressively advanced past
 60 an imprinting position where it receives at spaced intervals different legends predetermined by a plurality of legend determining members automatically advanced from a source of supply into
 65 operative position, a strip feeding apparatus composed of a pin type feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally spaced holes in a strip of material to be fed, and mounting means therefor including a plu-
 70 rality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, said strip engaging pins following an endless path exteriorly of the parallel spaced rods.

23. In a strip feeding and imprinting apparatus wherein a continuous strip of impression receiving material is progressively advanced past an imprinting position where it receives at spaced intervals different legends predetermined by a plurality of legend determining members automatically advanced from a source of supply into operative position, a strip feeding apparatus composed of a pin type feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally spaced holes in a strip of material to be fed, and mounting means therefore including a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, said strip engaging pins following an endless path surrounding the parallel spaced rods, one of which rods acting as a driving means for the strip engaging pins.

24. In a strip feeding and imprinting apparatus wherein a continuous strip of impression receiving material is progressively advanced past an imprinting position where it receives at spaced intervals different legends predetermined by a plurality of legend determining members automatically advanced from a source of supply into operative position having a movable platen, a pin type strip feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally spaced holes in a strip of paper to be fed, mounting means in offset relation to the platen including a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, one of said parallel rods acting as driving means for the strip engaging pins and being operatively connected to the movable platen, for actuation thereby.

25. In combination with a type imprinting machine wherein a continuous strip of impression receiving material is progressively advanced past an imprinting position where it receives a succession of imprinted legends predetermined by a plurality of legend determining members automatically advanced from a source of supply into operative position and having a movable platen, a pin type strip feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally spaced holes in a strip of paper to be fed, mounting means in offset relation to the platen including a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, one of said parallel rods acting as driving means for the strip engaging pins and being operatively connected for operation in synchronism with the type imprinting machine.

26. In combination with a type imprinting machine wherein a continuous strip of impression receiving material is progressively advanced past an imprinting position where it receives a succession of imprinted legends predetermined by a plurality of legend determining members automatically advanced from a source of supply into operative position and having a movable platen, a pin type strip feeding device including a traveling series of strip engaging pins progressively engageable in a succession of longitudinally

spaced holes in a strip of paper to be fed, mounting means in offset relation to the platen including a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, one of said parallel rods acting as a driving means for the said pin strip engaging means, and said type imprinting machine and pin type strip feeding means having common driving means for synchronous operation thereof.

27. In a strip feeding attachment for an imprinting machine, wherein succeeding portions of a plurality of superposed record strips having therein longitudinally spaced feed holes are adjusted and aligned relative to each other into registering relation during their advancement into imprinting position by engagement of a pin type feeding device in successive longitudinally spaced holes, the combination of a plurality of said strips with a pin type feeding device, including an endless traveling series of strip engaging pins progressively engageable in succeeding longitudinally spaced holes in the strips and a carrier therefor, mounting means for the pin type feeding device comprising a plurality of parallel spaced rods upon which the pin type feeding device is slidably adjustable laterally into different strip feeding positions, in each of which the strip engaging portions of the pins follow a circuitous path of travel exteriorly of the plurality of spaced rods, one of which serves as a drive shaft for the pin type feeding device in each of its positions of adjustment.

28. In a strip feeding attachment for an imprinting machine, wherein succeeding portions of a plurality of superposed record strips having therein longitudinally spaced feed holes are adjusted and aligned relative to each other into registering relation during their advancement into imprinting position by engagement of a pin type feeding device in successive longitudinally spaced holes, the combination of a plurality of said strips with a pin type feeding device, including an endless traveling series of strip engaging pins progressively engageable in succeeding longitudinally spaced holes in the strips, and following a circuitous path of travel, a plurality of parallel spaced rods disposed transversely of the path of travel of the strips upon which the pin type feeding device is mounted, one of said rods comprising an actuating shaft therefor in unison with the rotation of which the series of pins is advanced.

29. In a strip feeding attachment for an imprinting machine, wherein a plurality of superposed record strips having marginally punched spaced feeding holes in at least one margin thereof, succeeding portions of which are relatively adjusted into registering and aligned relation during advancement thereof into an imprint position of the machine, the combination with a plurality of said strips of a pin type feeding device progressively engageable in the marginally punched holes thereof for feeding and registering succeeding portions of the strips, a plurality of parallel spaced rods extending transversely through the feeding device, at least one of which is revoluble and serves as a drive shaft for the pin type feeding device with which it is operatively engaged.

JOHN Q. SHERMAN.