United States Patent

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[72] Inventors **James Woodhead**
Gloucestershire;
David Alan Hedley, Essex; Maurice Revie Jardine, Essex, all of England

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[73] Assignee **Roneo Limited**
Crydon, Surrey, England

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[33] **Great Britain**
[31] **37,992/67**

[54] **PRINT SELECTION AND PAPER FEED ADJUSTING MEANS IN POSTAL FRANKING MACHINES**
9 Claims, 12 Drawing Figs.

[52] **U.S. Cl.** **101/92,** 101/227, 226/139
[51] **Int. Cl.** **B41f 13/04,** B41l 47/46, B65h 25/00
[50] **Field of Search** 101/92, 91, 227, 219, 226, 228; 226/137, 139, 140, 141, 142

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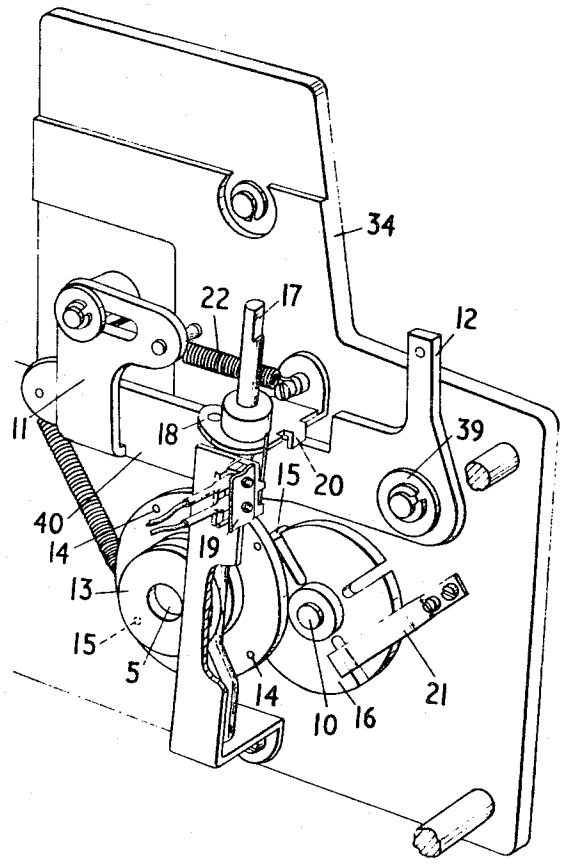
Primary Examiner—William B. Penn
Attorney—Holman, Glascock, Downing & Seebold

ABSTRACT: A franking machine of the kind adapted to provide printed labels for attachment to postal packets which cannot be inserted into the machine for franking in the normal way in which the length of label to be issued by the machine is controlled by a Geneva wheel which is rotated alternatively either one-half or one complete revolution by a rotatable member having long and short pins. These pins engage in slots in the Geneva wheel while the rotatable member is movable axially into alternative positions by a manual control to engage all the pins with the slots or only the long pins with the slots. The paper strip from which the labels are cut passes around a feed drum the circumference of which is equal to the length of a long label and the drum is rotated by way of a dog clutch mechanism the driving member of which is continuously rotated by an electric meter on the machine, the clutch being engageable by means of a sprag with the driven member of the clutch to rotate the drum at each operation of the machine by either 360° or 180° by means of a cam rotated by the Geneva wheel.

A pair of rotatable perforating knives positioned 180° apart is positioned adjacent the feed drum and rotate into contact with the paper around the drum at the appropriate positions thereof by being driven by the Geneva wheel to perforate the paper at long or short intervals as necessary.



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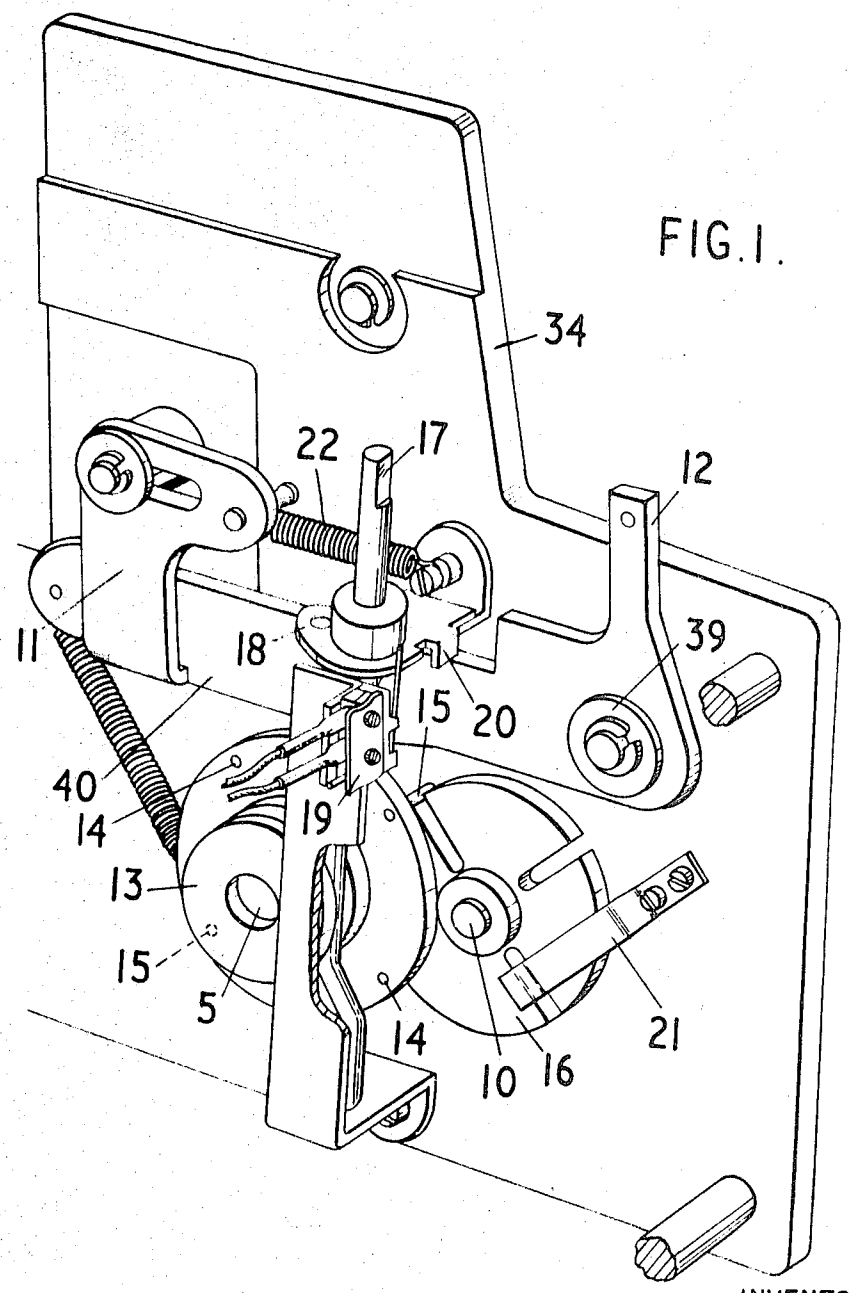

FIG. 1.

INVENTORS
JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

BY Glascock, Downing & Seebold.
ATTORNEYS

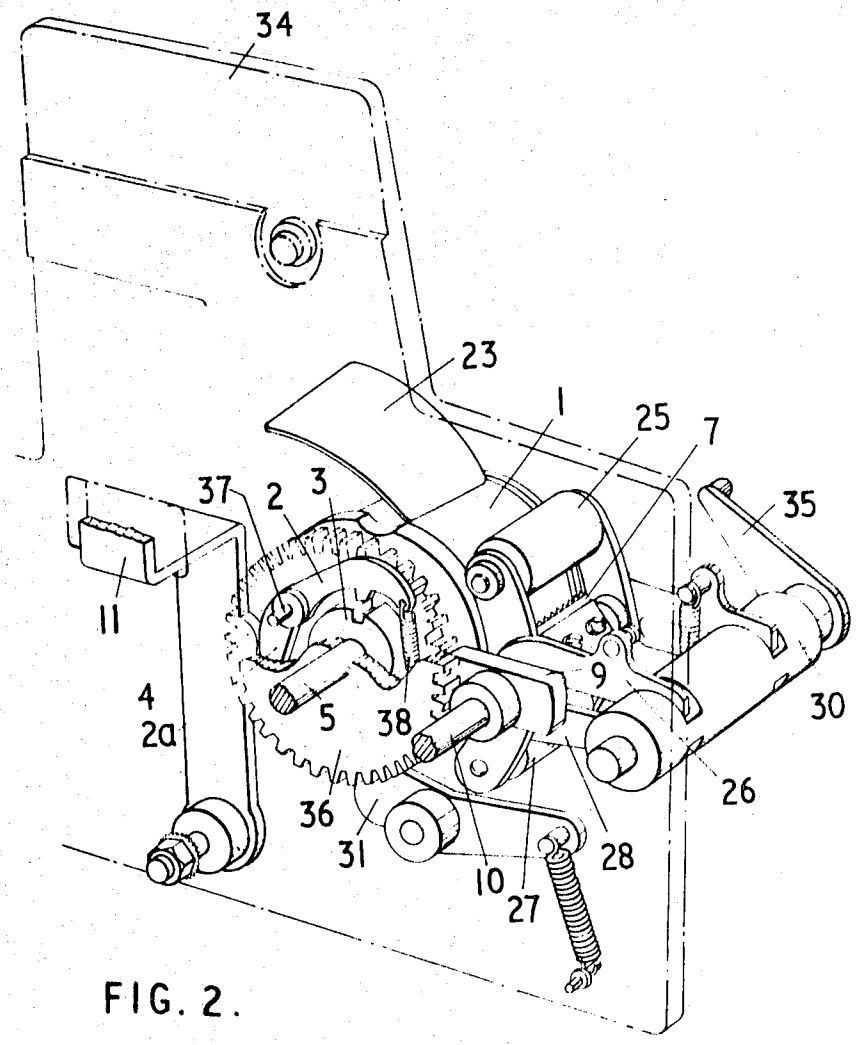

FIG. 2.

INVENTORS
JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

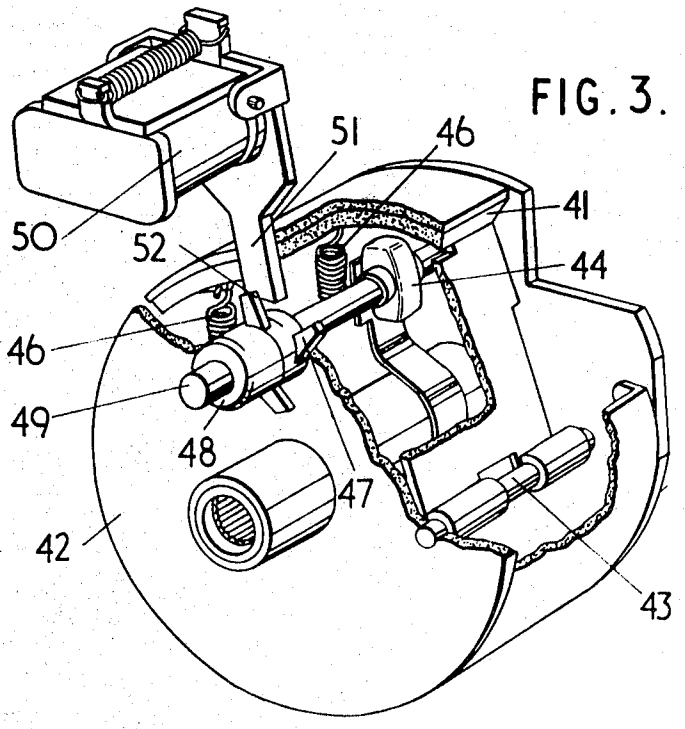

FIG. 3.

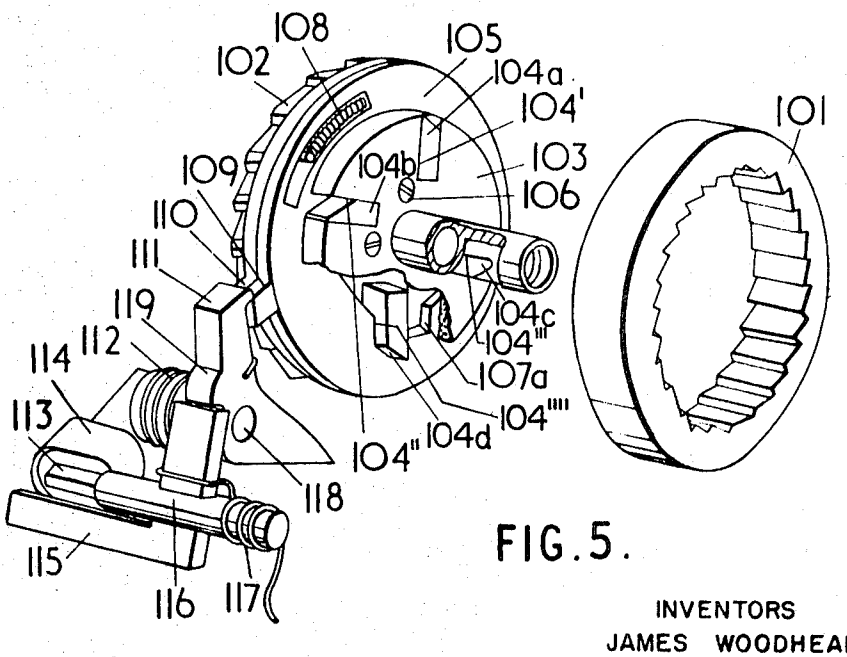

FIG. 5.

INVENTORS
JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

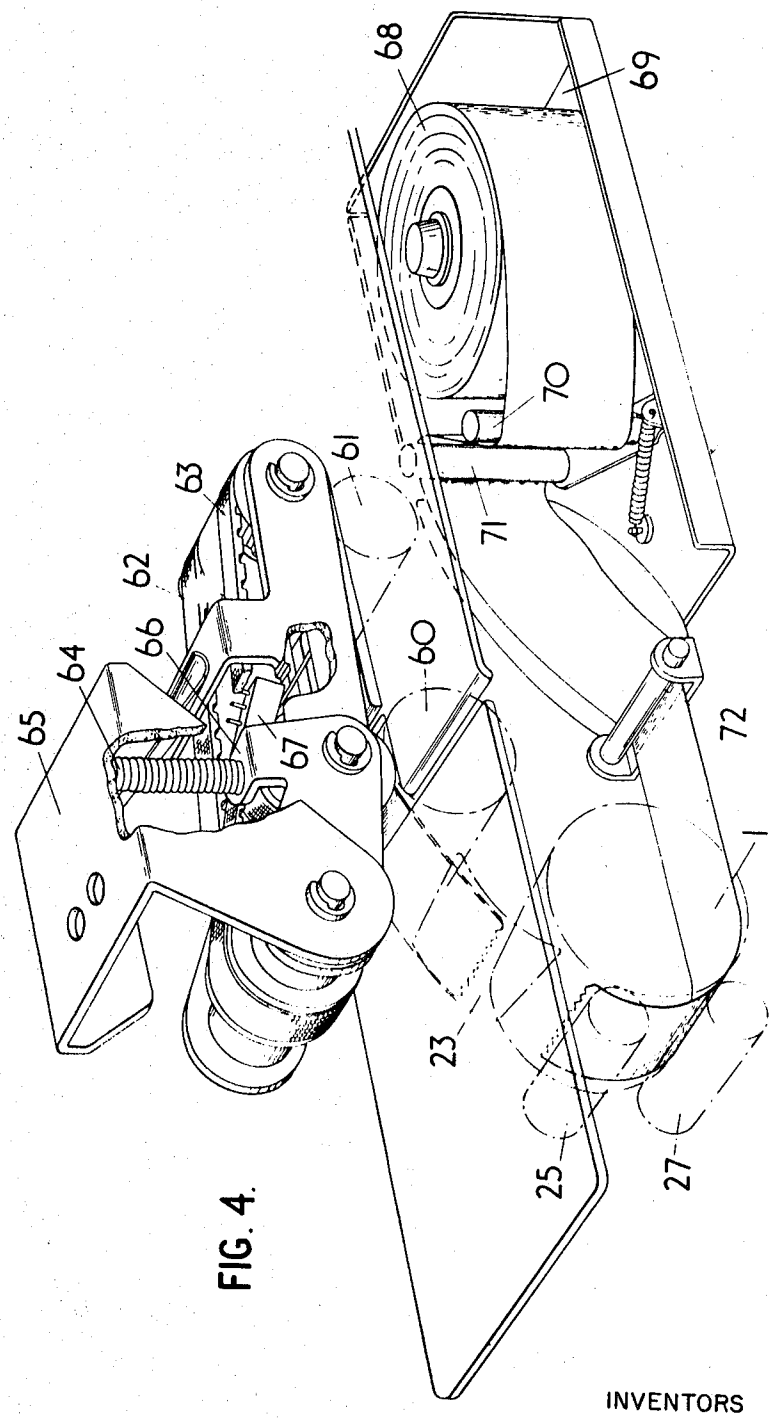

FIG. 4.

INVENTORS
JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

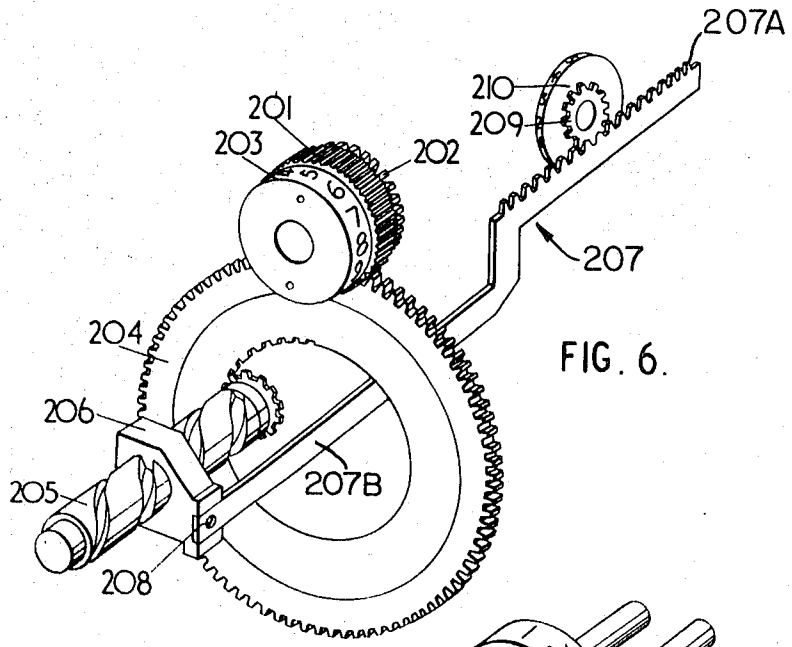

FIG. 6.

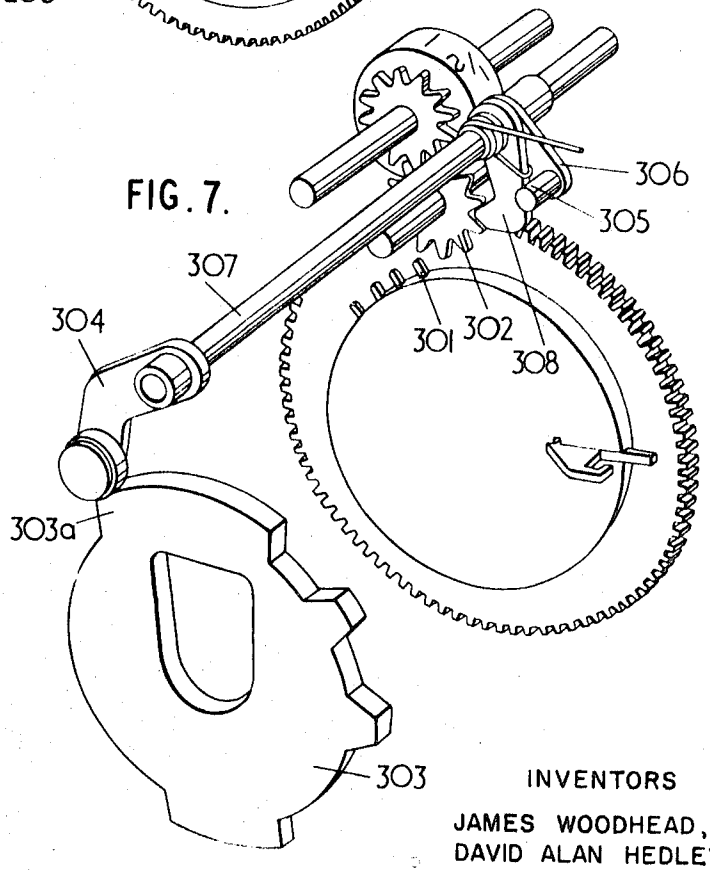

FIG. 7.

INVENTORS

JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

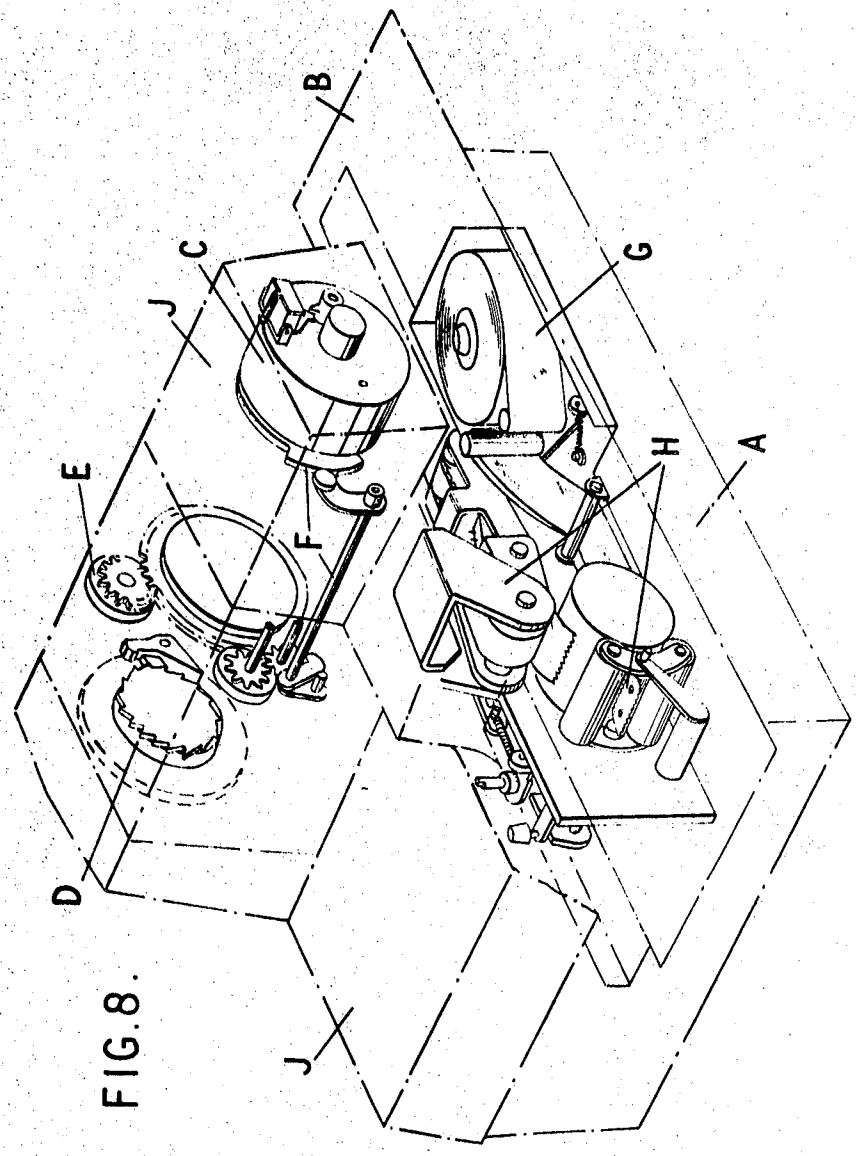

FIG.8.

INVENTORS

JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

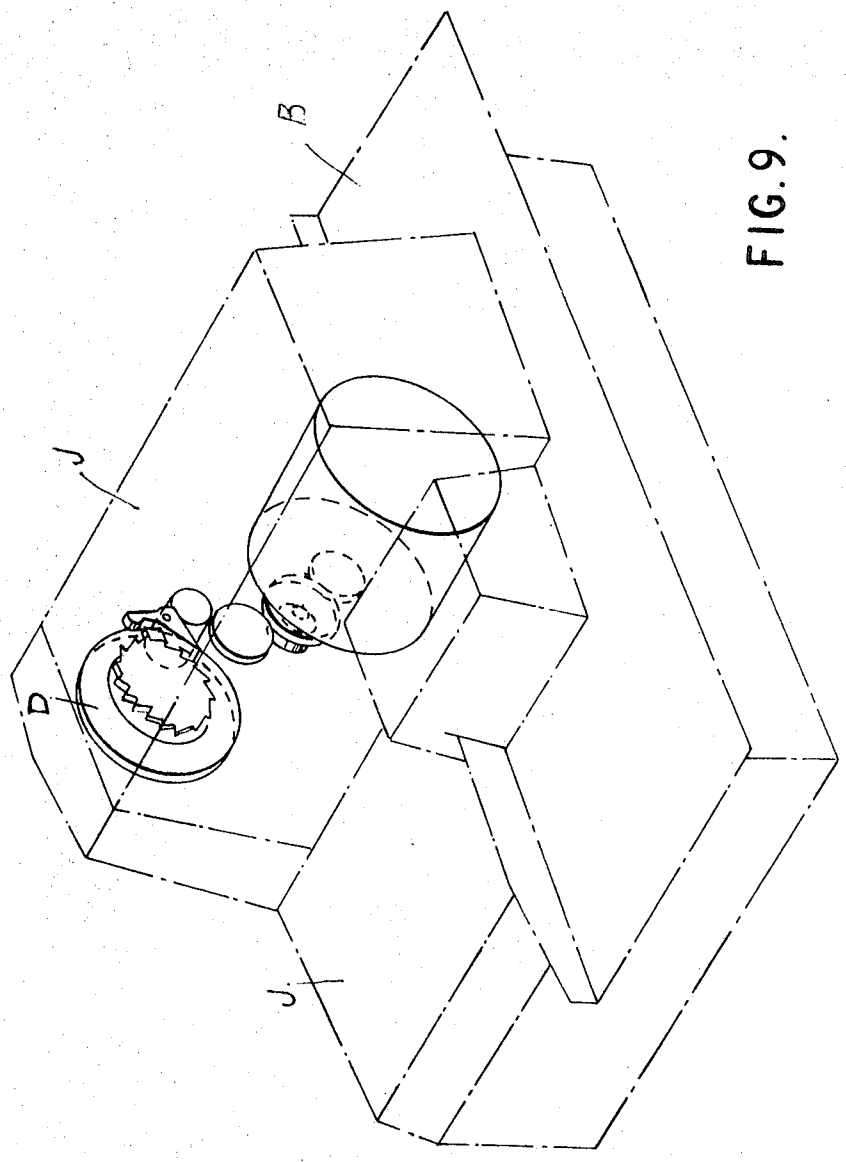

FIG. 9.

INVENTORS

JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

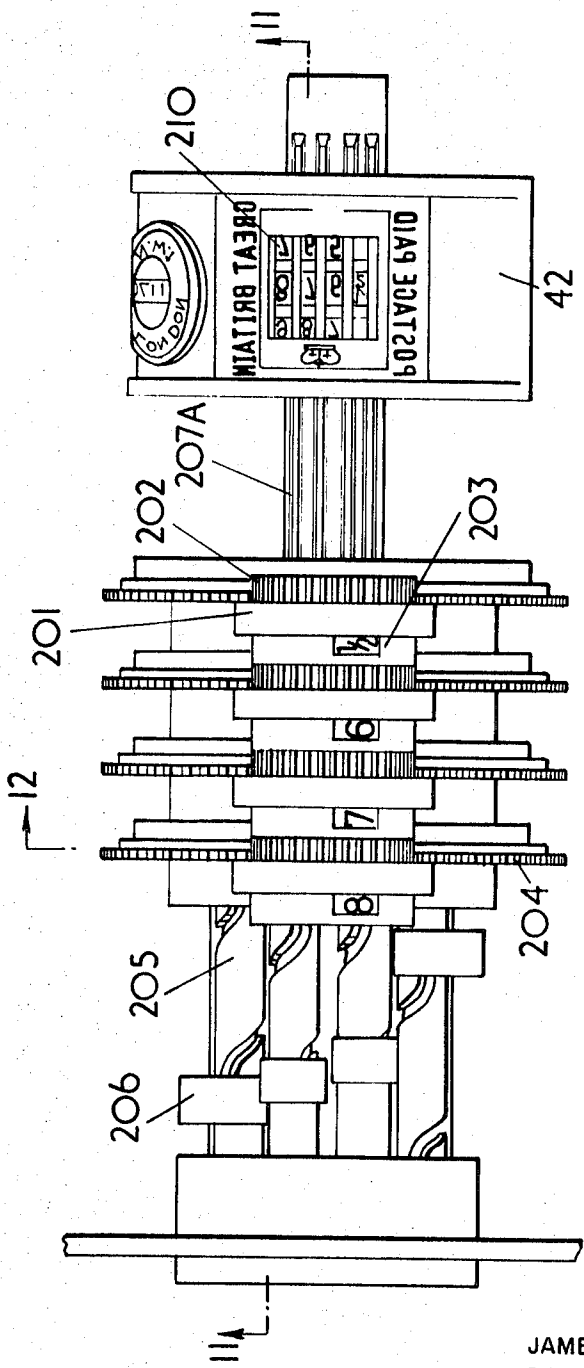

FIG.10.

INVENTORS

JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

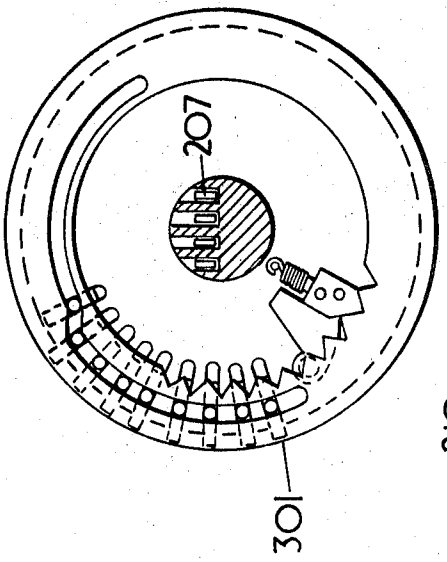

FIG. 12.

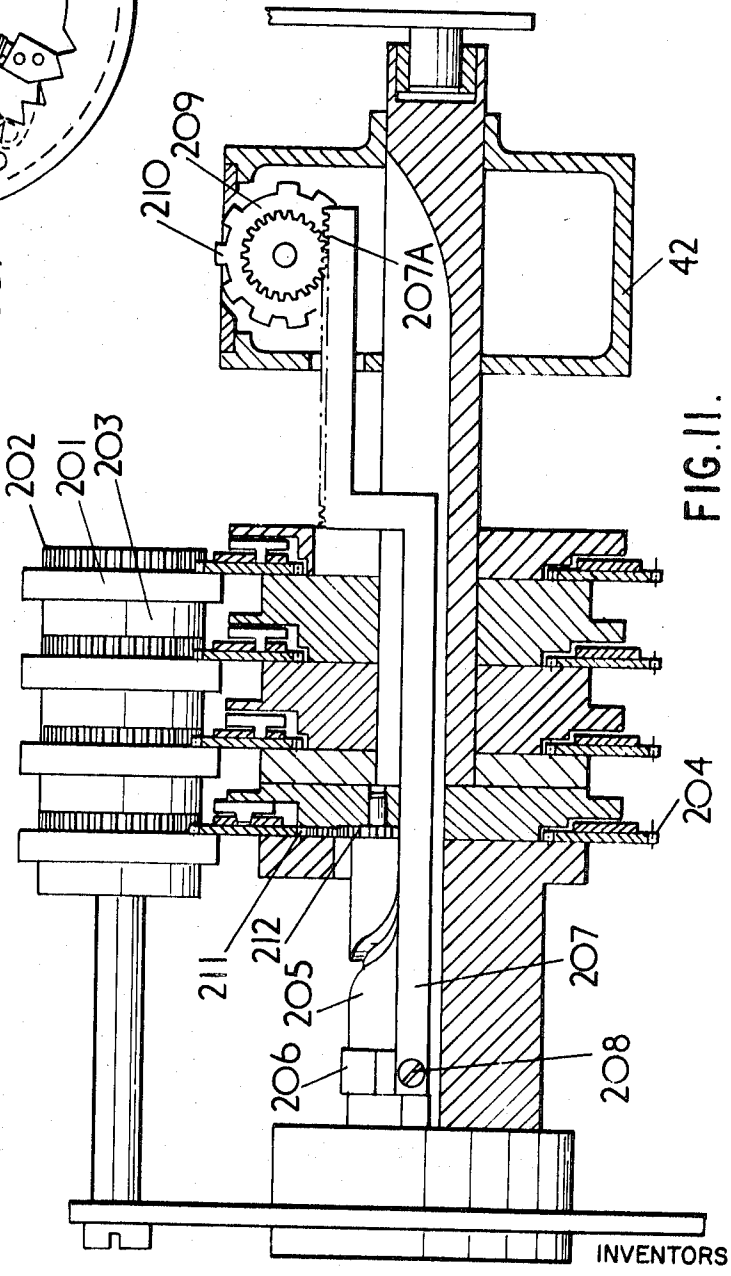

FIG. 11.

INVENTORS

JAMES WOODHEAD,
DAVID ALAN HEDLEY,
MAURICE REVIE JARDINE

PRINT SELECTION AND PAPER FEED ADJUSTING MEANS IN POSTAL FRANKING MACHINES

BACKGROUND OF THE INVENTION

The invention relates to franking machines of the kind which besides being capable of franking envelopes, is adapted to provide printed labels for attachment to postal packets which cannot be inserted into the machine for franking in the normal way, while the object of the invention is to provide a franking machine of the kind above referred to, which is positive in action, and is more reliable in use than machines heretofore proposed.

SUMMARY OF THE INVENTION

The invention consists in a franking machine of the kind adapted to provide printed labels for attachment to postal packets which cannot be inserted into the machine for franking in the normal way, characterized in that the length of label to be issued by the machine is controlled by a Geneva wheel which is rotated alternatively either one-half or one complete revolution by a rotatable member having long and short pins which engage in slots in the Geneva wheel, and which rotatable member is movable axially into alternative positions by a manual control to engage all the pins with the slots or only the long pins with the slots.

The invention further consists in a franking machine as set forth in the preceding paragraph in which the paper strip from which the labels are cut passes around the feed drum the circumference of which is equal to the length of a long label, the drum being rotated by way of a dog clutch mechanism the driving member of which is continuously rotated by an electric motor on the machine, and which is engageable by means of a sprag with the driven member of the clutch to rotate the drum at each operation of the machine by either 360° or 180° by means of a cam rotated by the Geneva wheel.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings show, by way of example only, one embodiment of the invention in which:

FIG. 1 is a view in perspective of the label paper feed mechanism;

FIG. 2 is a view in perspective of the other side of the frame illustrated in FIG. 1;

FIG. 3 is a view in perspective, partly broken away, of the slogan control;

FIG. 4 is a view in perspective of the interlock;

FIG. 5 is a perspective view of the clutch with the outer ring removed for clarity;

FIG. 6 is a perspective view of the value change mechanism;

FIG. 7 is a perspective view of the meter locking means;

FIG. 8 is a general perspective view of the machine showing the relationship of the mechanisms shown in FIGS. 1 to 7;

FIG. 9 is a view in perspective along the lines of FIG. 8 illustrating the manner in which the printing head is driven, via a clutch, by an electric motor;

FIG. 10 is a diagrammatic view in elevation of the mechanism for changing the position of the printing wheels;

FIG. 11 is a view taken along line 11—11 of FIG. 10, the view looking in the direction of the arrows; and

FIG. 12 is a view taken along line 12—12 of FIG. 10, the view looking in the direction of the arrows.

It may be seen from FIG. 8 that the machine comprises a hollow boxlike base member A which forms a common support for the internal mechanisms of the machine. There is provided a horizontal plate B, upon which, at the nearer end, the piece of mail to be franked is placed, and along which it is conveyed to pass under a printing head C.

The printing head C is driven by an electric motor, mounted below a clutch D, and connected thereto by a gear drive (FIG. 9). The motor runs continuously and the drive is initiated by the clutch D during each cycle of operation.

The value to which the printing wheels in the head C are selected by means of selector wheels, of which one E is shown.

To ensure that the total of the values printed are correct and no errors can be introduced, the register meter is locked by means of a pawl and cam mechanism F.

Besides franking pieces of mail such as envelopes, the machine is adapted to print upon labels cut from a roll of paper G. The paper strip is fed to the printing head C by a feed and cutting mechanism H which is adapted to provide labels of two different lengths, and also to control the printing of a slogan or other advertising display upon each label at the choice of the operator of the machine.

The mechanism of the machine is protected by a cover J which is removable for servicing of the machine.

The features of the machine above referred to are each described in detail hereinafter with reference to the respective FIGS. 1—7.

The label paper feed mechanism and the slogan control and interlock device are provided in order that one can obtain long or short labels according to the setting of a hand control, and includes means for suppressing the printing of the slogan or advertising display when short labels are selected.

FIG. 1 shows a main bearing side frame 34 with the nearer part of the mechanism in view, and FIG. 2 shows the assembly on the other side of the main frame. A drum 1, FIG. 2, is mounted integrally on the shaft 5, as also is disc 3 which has two notches 3A cut to 180°. The drum 1 is of such diameter that its periphery is equal to the length of a long label. Half its periphery is equal to a short label. By operating a handset lever 35 a cam shaft 30 can be rotated, raising and lowering levers 26 and 28 respectively. The bearings of pressure rollers 25 and 27 are mounted in these levers so that the rollers are lifted clear from the drum 1 for purposes of loading the machine with paper. The free end of a roll of paper on a mounting, not shown, is threaded around the drum 1 and over a "seesaw" pallet 23. The pressure of rollers 25 and 27 is then restored.

With the power switched on, a gear 36 rotates continuously. A clutch sprag 2 rotates with this gear and is pivotally mounted on a stud 37 which is integral with the gear 36. The gear 36 is free to move around the shaft 5. A tooth 2B of the sprag 2 would engage in the notch 3A in the disc 3 but for the presence of a lobe 4 on lever 11. The top end of lever 11 passes through side frame 34, FIG. 1, having a slotted hole and a strong spring 22 urging it to the right hand of the figure as shown. The spring 38, FIG. 2, is not strong enough to overcome the pressure existing at the lobe 4, and so that the tooth 2B on sprag 2 would "jump" or ride clear of the notch 3A in disc 3. Similarly, the presence of a double lobed cam 9 on shaft 10 prevents engagement of the sprag in second and 180° opposite notch. No drive will therefore be transferred to the drum shaft 5.

Drum shaft 5 comes through a disc 13 with a grooved hub which is capable of being moved laterally to and fro having a key, not shown, which engages with a slot in the shaft 5. The disc 13 therefore revolves with the drum 1 and shaft 5. Disc 13 has four pins, two long ones 15, one not being visible, and two short ones 14. These pins 14 and 15 engage in radial slots 16A in a Geneva wheel 16. The Geneva wheel 16 is fixed to the shaft 10, which is integral with cam 9, see FIG. 2, and knife assembly 7.

The knife assembly 7 has a double-edged blade 7A (only one side of which is shown) with sharp V-shaped points at two opposite 180° apart. The drum 1 has two inserts 73 diametrically opposite (only one of which is shown) which have V-grooves exactly complementary to the serrations 93 of blade 7A. These two inserts 73 are locked into drum 1, but have springs underneath urging them outwards. The blade 7A is of such a size as to interfere slightly piercing the label paper to the maximum extent. Damage to the insert is avoided because of the give in the spring insert.

The axial position of disc 13 is determined by a cranked rod 17 which has a hand controlled knob 74. Plate 18 is integral with rod 17 and has a lug 20 which is inoperative in the position shown. This position is the "long" label position with the

microswitch **19** inoperative, and the disc **13** at its furthermost throw forwards away from the Geneva wheel **16**. In this position, short pins **14** cannot engage in the slots **16A** of the Geneva wheel **16**.

The action which occurs on the demanding of a "long" label is as follows:

A slide **12**, FIG. **1**, has a slotted hole behind washer **39**. The slide can therefore be moved by hand operation to the left by a thumb knob not shown, with stepped end at **40** also carrying lever **11** to the left. Lobe **4**, FIG. **2**, ceases to influence sprag **2** which now engages disc **3** and rotates the shaft **5** with the drum **1** in a counterclockwise direction. After 90° only of revolution, the pin **15**, FIG. **1**, on the underside of disc **13** approaches one of the radial slots **16A** in the Geneva wheel **16**.

During the next 90° of revolution, Geneva wheel **16** is rotated also through 90°, taking with it shaft **10**, cam **9** and the knife blade assembly **7**. By virtue of the cam **9** rotating in a clockwise direction, it clears lobe **2A** of sprag **2**, thus allowing sprag **2** to continue driving disc **3**. Should the hand operation of slide **12** have been unnecessarily prolonged, no repeat can occur while slide **12** is raised clear of lever **11** by the action of pins **15** as they revolve with disc **13**.

The drum **1**, shaft **5** and disc **13** continue to rotate until sprag **2** has again become engaged by the restored presence of lobe **4** and lever **11**. During the last 90° of revolution, the pin **15**, FIG. **1**, will have passed the Geneva wheel **16** causing blade **7A**, FIG. **2**, to become engaged with the paper and the insert **73** in drum **1**. The paper becomes perforated severely, but not quite separated. At the moment of piercing, the leading edge of the paper has entered the first feed rolls of the printing head feed, not shown, and is pulled tightly over the pallet **23**, FIGS. **2** and **4**. This member is mounted on a single shouldered stud which is offset, so that when the paper tightens thereover, it "seesaws" raising one side. This occurs when the perforation passes over it, thus triggering off a tear, which is then easily completed by the tug of the feed rolls.

The paper thus is separated before it passes under the franking head. The length of paper is equal to the total circumference of the drum **1**. In this setting, it is assumed that a slogan or display is to be printed. Feed rolls **60** and **61** carry the label forward to the printing drum head, and have thereabove, as shown in FIG. **4**, flexible pressure bands **62** and **63**, which are pressed downwards by spring **64** between support bracket **65** and carriage **66**. The rotation of the printing drum head is initiated by the contacting of the arm of a switch **67**, either by a label, when these are being used, or by an envelope when it is inserted into the pinch or nip of the roll **60**. A roll **68** of paper strip is housed in a means **69** in the side of the machine, and passes over guide pins **70**, **71** and **72** and thence around the feed drum **1** as previously described. The method of demanding the slogan printing automatically is now described:

In FIG. **3** is seen the part of a printing drum head **42** provided with a slogan die carrier **41**. The carrier **41** is pivoted at **43**, and its underside rides on cam **44**, mounted on shaft **49**, while also on shaft **49** are two wheels **47** and **48**, each having two teeth projecting at 180° opposite. These wheels are set at 90° to one another. As previously mentioned in the description relating to FIG. **1** for demanding a "long" label, the plate **18** and the lug **20** do not close the microswitch **19**. Therefore, the electrical circuit is not closed and electromagnet **50**, FIG. **3**, is not energized. The armature therefore is at rest in the position shown.

When the printing head is operated, it revolves counterclockwise. The lower extremity of armature **51** lies in the path of wheel **47**, and as it sweeps past it will be revolved in a clockwise direction, turning shaft **49** through 90° raising the slogan die carrier **41** by means of the cam **44**. This is retained by springs **46**. A die **41A** mounted on the carrier **41**, is now in its raised or printing position, and will remain so, during further cycles of operation, because the tooth of wheel **47** is over to the right hand. Also, because the shaft **49** has been moved through 90°, tooth **52** of the nearer wheel **48** is now around in a position where it will engage the tip of armature **51** should the magnet **50** become energized.

The setting of a short label is now described in reference to FIG. **1**. The control knob **74** is operated and turns the cranked rod **17** through 90° to bring the lug **20** around to close the microswitch **19** which causes the operation of the electromagnet **50**, FIG. **3**. The disc **13**, FIG. **1**, moves nearer to the Geneva wheel **16**. The short pins **14** now operate in the radial slots **16A** of the Geneva wheel **16**, in addition to the long pins **15**. With the hand operation of slide **12** which pushes lever **11**, this operates the sprag **2**, FIG. **2**, after the manner previously described, and the drum **1** revolves. During the first 90° of rotation, pin **14** moves the Geneva wheel **16**, shaft **10** and knife assembly **7**, FIG. **2**, and also cam **9**. During the next 90° of rotation, the Geneva wheel **16**, FIG. **1**, is again moved. The result of this repeated operation in the first 180° of revolution of drum **1**, FIG. **2**, is that the cam **9** now presents a high portion in the path of sprag **2** and also the knife assembly **7** serrates the paper. Sprag **2** is disengaged from the disc **3** and drum **1** comes to rest after 180° movement only. Enough paper feed only for a short label is half the circumference of the drum **1**. The paper is parted as before described. The slogan die **41A** does not print ink on the impression rollers because the magnet armature **51**, being attracted, has caused wheel **48** to turn shaft **49** and cam **44** back to low position.

In FIG. **1**, detent spring member **21** retains the Geneva wheel **16**, so that it remains in the true position for the entry of the pins **14** and **15**. The plate **18** is so shaped that the slide **12** can only be operated in the correct settings of shaft **17**. Detent member **31** retains drum **1** and shaft **5** in the true at rest position and avoids overthrow when the sprag **2** is disengaged.

The printing head C is driven by an electric motor, FIG. **9**, by way of clutch D. The motor runs continuously while the machine is in use, and each franking process is initiated by the engagement of the clutch D. The clutch is operated remotely, and it is of vital importance that the printing and recording head should make one revolution and that it should be arrested at a precisely predetermined position, and be prevented from rotating further until demanded to do so by the remote control.

Details of the clutch are shown in FIG. **5** in which outer toothed ring **101** is shown separated, so that the pawl mechanism housing may be clearly seen. The outer ring **101** is driven continuously by the electric motor and fits freely over pawl housing **103** which contains and retains four driving pawls **104***a*, **104***b*, **104***c* and **104***d*, each of which is urged in an outward direction by a spring, not shown, under each pawl. Screws **106** secure pawl housing **103** to drive plate **102**, and also secure pawl housing **103** and drive plate **102** to the end face of a printing/recording head shaft, not shown, which is required to make only one revolution before being arrested by means of projections **109** and **110** being caught under hooked end of pawl **111**.

A pawl control plate **105** is located between pawl housing **103** and the drive plate **102**, and is free to move radially by a predetermined amount, in relation to drive plate **102** and pawl housing **103**. Pawl control plate **105** is cut away internally to provide four internal cam faces **107***a*, **107***b*, **107***c* and **107***d*, of which only the first can be seen, and each of which engages a projection provided on the inner face on the four driving pawls **104***a*, *104b*, **104***c* and **104***d* retained in the slots in the pawl housing **103**.

A trigger stop **111** is pivoted on a shaft **118** and the hooked end of this trigger stop is urged away from the clutch components **102**, **103**, and **105** by a torsion spring **112**.

When the shaft to which the pawl housing **103** and drive plate **102** are rigidly attached, is required to make one revolution, an electric current passing through coil **114** energizes magnet **113**, which then attracts the horizontal portion of armature **115**, pivoted on shaft **116**, thereby withdrawing the top end of the vertical portion of armature **115** from under a projection **119** on trigger stop **111**.

When the top end of armature **115** is withdrawn from under the projection **119** on trigger stop **111**, torsion spring **112** causes the hooked end of trigger stop **111** to move away from the projection **109** on pawl housing **103** and the projection **110** on drive plate **102**.

One end of spring **108** is secured to pawl plate **105**, and the other end of the spring is secured to drive plate **102**. When the hooked end of the trigger stop **111** is withdrawn from projection **109** and projection **110**, spring **108** causes pawl plate **105** to rotate in a clockwise direction to the limit provided by an internal stop, and the internal cam faces **107***a*, **107***b*, **107***c* and **107***d*, in pawl control plate **105** permit the four driving pawls **104***a*, **104***b*, **104***c* and **104***d* to be urged upwards and outwards, each by its own spring, not shown, against the inner toothed bore of outer ring **101**.

The pawls **104***a*, **104***b*, **104***c* and **104***d*, are unequally spaced around pawl plate **103**, and are positioned in such a manner that only one of the four pawls **104***a*, **104***b*, **104***c* and **104***d*, can locate against any one of the internal ratchet teeth in the outer ring **101**.

The pawls are spaced so that the radial difference between each pawl is equal to one-fourth of the pitch of the internal teeth in outer ring **101**. If, therefore, one pawl just misses contact with the radial face of any one of the internal teeth in outer ring **101**, the next pawl will engage one-fourth of a pitch of the internal teeth in the outer ring **101** later.

When any one of the pawls **104***a*, **104***b*, **104***c* and **104***d* engage in any one of the internal teeth in outer ring **101**, the constantly rotating outer ring **101** drives the printing head via one of the pawls and causes the printing head to rotate.

When the hooked end of trigger stop **111** is withdrawn from projections **109** and **110**, the pointed end of trigger stop **111** is advanced towards the peripheries of pawl control plate **105** and the drive plate **102**, the pointed end of trigger stop **111** advances to within an appropriate distance such that when during the rotation of the printing head the projections **109** and **110** impinge on the pointed end of trigger stop **111**, the projections **109** and **110** cause trigger stop **111** to partially rotate around its spindle **118**, and cause hooked end of trigger stop **111** to be placed in the path of projections **109** and **110**.

The vertical portion of armature **115** is urged by torsion spring **117** against the projection **119** of trigger stop **111**. When the hooked end of trigger stop **111** is urged inwards by projections **109** and **110**, pushing the tail end of trigger stop **111** forward, the extreme end of the vertical portion of armature **115** is able to move under projection **119**, on the back face of trigger stop **111**, and hold this component in such a position that the hooked end trigger stop **111** is held firmly in the path of the rotating projections **109** and **110**.

At the commencement of rotation of the shaft, the projection **109** has been moved radially out of line with respect to the projection **110** by virtue of the spring **108** which is secured at one end to the pawl plate **105** and at the other end to the drive plate **102** rotating by a small amount. Hence, the projection **109** can reach the underside of the hooked end of trigger stop **111** in advance of the projection **110** on the drive plate **102** and when the projection **109** meets the undersurface of the hooked end of the stop **111**, the projection is arrested in such position and thus causes the slots **104'**, **104''**, **104'''** and **104''''** in the pawl plate **105** to be rotated out of line with the slots in the pawl housing **103**. This action forces downwardly the pawls **104***a*, **104***b*, **104***c* and **104***d* into the pawl housing whereby the projecting rim of the pawl plate **105** retains the pawls in their downward position and out of engagement with the internal teeth in the outer tooted ring **101**. Drive plate **102** continues to rotate until the projection **110** also contacts the underface of the hooked end of trigger stop **111**.

When the projection **110** meets the underface of the hooked end of trigger stop **111**, drive plate **102** is arrested, and as this plate is rigidly attached to the printing head shaft, the printing head is also arrested in a desired position. When the printing head and drive plate **102** are arrested by the underface of the hooked end of trigger stop **111**, a pawl, not shown, engages in one of the teeth on the periphery of the drive plate **102** and prevents the drive plate rotating in an anticlockwise direction.

In FIG. **6** there is illustrated the mechanism for changing the printing wheel within the printing head C with a change of setting of the value required to be printed by the selector wheel **201**. While this figure illustrates but one such selector wheel **201**, it is to be understood that a selector wheel **201** is provided for each printing wheel and each selector wheel is operated by a similar mechanism.

When a value selecting wheel **201** is rotated by an appropriate amount, to change the value to be printed upon a piece of mail passed through the machine, printing wheel **210** prints a value identical with the number selected. It will be observed that the value selector wheel **201** and the printing wheel **210** rotate about axes which are at right angles to one another.

The value selecting wheel **201**, which has on one face a pinion **202** and on the other face a projecting drum on the periphery of which are numerals indicating values required to be printed, is one of a number of wheels mounted coaxially with one another, and each meshes with the teeth on the periphery of a disc **204**, coaxial with one another, and rotates it by an appropriate amount. Each disc **204** engages its internal teeth **211** with a gear **212** on the end of a screw **205** provided with one or more coarse helical grooves.

A nut **206** with a corresponding thread is located on the screw **205**, and moves along the latter with rotation of the value selecting wheel **201**. There is a screw **205** for each wheel **201** and disc **204**, which are spaced circumferentially around the axis of the disc **204**. A rack **207** is provided for each nut **206** and has a tooth portion **207A** and a bar portion **207B** integrally connected therewith. The bar portion **207B** is attached to the nut **206** by a screw **208** and the teeth of the portion **207A** mesh with a pinion **209** of a printing wheel **210**. All the printing wheels are on the same axis (FIG. **10**).

The gear ratio of pinions **202**, discs **204**, screws **205**, and toothed portions **207A** of the racks **207** and pinions **209**, are so chosen that when the value selecting wheel **201** is moved a certain amount, the printing wheels **210** rotate a corresponding amount precisely related to the amount of rotation of the value selecting wheels **201**.

One or more of the mechanisms illustrated in FIG. **6** may be used in each postal franking machine allowing a plurality of value selecting wheels **201** to be used independently or collectively to operate one or a plurality of printing wheels **210**.

In FIG. **7**, there is shown a locking mechanism associated with the register meter, which indicates the total value which has been printed by a machine, and is provided in order to prevent errors in the readings given. The printing head is provided in known manner with a toothed wheel, in which the number of teeth which project are caused to correspond to the value to which the associated printing wheel is set. The means for permitting radial movement of the teeth is by a cam track and pins and reference is made to U.S. Pat. No. 2,727,687. For example, in FIG. **7** there are four teeth projecting, of which the last tooth is tooth **301**. Consequently, when the printing head is rotated in an anticlockwise direction during the franking process, gear **302** is moved four teeth, with the tooth **301** having just left the gear **302**. The gear **302** engages the gear beside the numbered drum and the latter has just moved four units.

In order to prevent any overthrow taking place after the last tooth **301** (which is at all times the last tooth to pass the intermediate transfer gear **302** which engages with a gear integral with the value recording wheels **309**) has left the gear **302**, a disc **303** is provided with a cam **303A** thereon, which engages follower **304A** on a lever **304** which is fixed to the shaft **307**, on which there is also provided a lever **306** with a pin **305**, which engages the back of pawl **308**, and positively prevents further rotation of the gear **302**. Prior to the last tooth **301** passing gear **302**, the pawl **308** is held in mesh by spring **310**. The timing of the cam is such that the pawl **308** commences to

engage between two teeth of the gear **302** before the last rising tooth **301** has left the gear **302**, thus ensuring that no overthrow is possible.

It is to be understood that the above description is by way of example only and that details for carrying the invention into effect may be varied without departing from the scope of the invention claimed.

We claim:

1. A franking machine of the kind adapted to provide printed labels for attachment to postal packets, comprising a rotatable printing means, means to feed paper to the printing means, a Geneva wheel connected to the paper feed means for controlling the length of label to be issued by the machine, means mounting said Geneva wheel for rotation in two different increments of rotation, said Geneva wheel having radial slots therein, a rotatable member supported for axial movement in two different increments toward and away from the Geneva wheel, said rotatable member having long and short pins for engaging the slots in the Geneva wheel when the Geneva wheel is rotated in its respective increments of rotation, the axial position of the rotatable member in one axial increment of movement, when a label of long length is to be printed, being such that only the long pins engage in the slots while for the printing of labels of short length, the axial position of the rotatable member when it is moved the other axial increment of movement is such that both the long and short pins engage in the slots, and manual control means operably related to the rotatable member for moving the member axially into alternative positions one or the other increments of axial movement to engage only the long pins with the slots or all the pins with the slots.

2. A franking machine of the kind adapted to provide printed labels for attachment to postal packets comprising a Geneva wheel for controlling the length of the label to be issued by the machine, said Geneva wheel having slots therein, a rotatable member supported for axial movement, said rotatable member having long and short pins for engaging the slots when the Geneva wheel is rotated alternatively either one-half or one complete revolution, manual control means operably related to the rotatable member for moving the rotatable member axially into alternative positions to engage all of the pins with the slots or only the long pins with the slots, a rotatable feed drum, the circumference of which is equal to the length of a long label, a paper strip from which the labels are cut passes around the feed drum, a dog clutch mechanism for the drum having a driving member and a driven member, an electric motor for continuously rotating the driving member, a sprag engageable with the driven member of the clutch to rotate the drum at each operation of the machine by either 360° or 180° and a cam rotated by the Geneva wheel to effect such engagement.

3. The franking machine as claimed in claim **2** in which the sprag is defined by a lever, a stud on the driving member of the clutch on which said lever is pivotable, a tooth on the lever engageable alternatively with a pair of notches in the driven member, said notches being spaced apart 180° in respect of the axis of rotation of the driven member, with the lever being pivoted and the tooth removed from the slot after 180° of rotation of the drum by the cam rotated by the Geneva wheel, when the manual control means is set for the issuing of short labels, and the driven member is allowed to make a complete revolution when the manual control means is set for the issuing of long labels.

4. The franking machine as claimed in claim **2** in which there is provided adjacent the feed drum, a pair of rotatable perforating knives positioned 180° apart in respect of their axis of rotation, and drive means between said knives and Geneva wheel to rotate said knives into contact with the paper around the drum at the appropriate position thereon to perforate the paper at long or short intervals as necessary.

5. The franking machine as claimed in claim **1** including a pivoting drum head over which the paper passes, an electric switch operable related to the manual control means and which is closed when the control means is set so that the rotatable member is moved to its other increment for labels of short length, an electromagnetic device and means connecting the switch to the electromagnetic device whereby operation thereof causes the printing means to print only a length of text appropriate to a label of short length.

6. The franking machine as claimed in claim **5** including a carrier for a printing die used only when a label of long length is issued by the machine, means pivotably mounting the carrier upon the printing means, a rotatable cam, a spring operably coupled with the cam, said carrier being movable into the printing position by the cam, the cam being rotated into alternative positions by teeth projecting from the printing means and engageable alternatively by a projection on an armature of the electromagnetic device when occupying alternative positions, as the printing means rotates.

7. The franking machine as claimed in claim **4** including a curved pallet upon the paper on the feed drum, and means pivoting the pallet to tilt transversely of the direction of motion of the paper strip, to cause the label to become detached at the perforation when tension is placed thereupon during feeding to the printing drum head.

8. The franking machine as claimed in claim **7**, in which the printing means includes a rotatable printing drum head, and an electric switch included in the feed means for initiating the rotation of the printing drum head by the passage of a label through the feed means.

9. The franking machine as claimed in claim **8** including an electric motor, a dog clutch operably associated with the motor and an electromagnetic device controlled by the electric switch incorporated in the paper feed means for effecting engagement of the clutch.