The last article introduced the New Zealand Moss machine by mentioning that the British Post Office had seen a reference to it in the 1906–7 Annual Report of the Postmaster General of New Zealand. A letter had been sent to New Zealand on 6 December 1907, requesting further details.

This letter was acknowledged on 23 January 1908, enclosing a full description of the machine and its use. The NZ PMG stated that the machine was very useful to the public but probably would not reduce the work of the Post Office. Franked letters were posted in ordinary street letter boxes and franks were ‘regarded as taking the place of a postage stamp’. The inventors had been asked if they would be willing to send a machine for trial in UK. The letter concluded that it had been found necessary to obtain legislation to permit the use of the machines.

**Frustrating times for Mr Moss**

On receipt of the letter, the view of the UK Post Office was that the machines would ‘involve considerable extra work to the Department of an entirely unremunerative character’. Another year was to pass before the next stage of the Moss story.

The machine continued to be used in New Zealand but the franks were not valid on international mail. Not until 1920 did the Universal Postal Union sanction this.

The New Zealand Post Office divided meter-franked mail into three categories: internal mail—the frank was cancelled in the same manner as if it had been a postage stamp.

Mail for countries inside the British Empire—the frank was cancelled and a ‘PAID’ mark in red to the same value as the frank was added to the envelope.

Mail for foreign countries outside the British Empire—the frank was cancelled and normal postage stamps were added to the envelope and cancelled.

In New Zealand meter franks at that time were printed in black ink. Fig 10 illustrates a letter from Auckland to London dated ‘Jul 29 1908’. The small circular frank (AUCKLAND NZ / POST-AGE PAID) is arrowed as is the ‘PAID’ mark. The cancellation is by a Burns machine. Fig 11 shows a letter to Holland. This has three meter franks (two at 1d. and one at 1⁄2d.). The bars along the top of two of the franks were caused by creases in the envelope—the printing was a vertical motion through an inked ribbon.

The New Zealand Post Office letter of 23 January 1908 also mentioned that the Moss machine had been re-designed, enabling it to be used without prepayment by a coin. Moss did, in fact, apply for a British Patent on 24 March 1908. This was granted as No 6509 on 18 March 1909. Instead of the operating lever and toothed wheel with pawl, as described in the last article, there was a rotating handle and gear train. The dies (now normally five) were still arranged as a quadrant. The value of franks printed was recorded on a counter. The value was set by an indicator pointer as previously.

When set to the lowest value (1⁄2d.) the gear arrangement was such that a complete rotation of the handle caused the die to print the frank on to the letter through an inked ribbon and the gears to move the counter by one 1⁄2d. unit.

The inked ribbon was moved along by the length occupied by the die. Selection of other values brought another appropriate gear into action so the counter registered the required number of units. The gear arrangement was similar to that used in a motor car. Fig 12 is taken from a contemporary leaflet (Courtesy Heritage Collections of the Post Office) and illustrates the machine showing the operating handle on the right-hand side, the value-indicating lever at the front and the counter window at the top.

In August 1909 a Mr Hislop (Secretary to Sir Joseph Ward of New Zealand) visited the UK for discussions with the Board of Trade. After a meeting at Somerset House, Mr Hislop was introduced to the Secretary of the Post Office—he had brought with him a Moss machine. This was demonstrated on Monday 16 August and trial marks were made. The machine was not allowed to be dismantled for examination and Mr Hislop returned to New Zealand.
the following Friday. Interestingly, at least one envelope with a trial mark ‘escaped’ and passed through the post on 26 August—ten days after the trial. This is illustrated in Fig 13 (Courtesy Heritage Collections of the Post Office. The Heritage Collections house other marks and an interesting leaflet entitled Evolution of the Letter and Telegram Stamping Machine, published by the Moss Automatic Stamping Co Ltd.

After much discussion between various Departments over the following months, on 31 January 1910 a letter was sent to Messrs Wheater, Cornwallis-West & Co, who had introduced Mr Hislop the previous August. This informed them that the Postmaster General ‘...sees no prospect of the British Post Office sanctioning the use in this Country of machines for franking postal correspondence’. The major breakthrough came in November 1920, when the Universal Postal Union, meeting in Madrid, approved meter franks for international use. Naturally, there were conditions, the most important being:

a. The franks had to be printed in bright red.
b. The name of the issuing country had to appear in the frank.
c. The value paid had to be shown in Arabic figures.
d. The frank had to be printed in the top right-hand corner of the mail item and on the address side.

The UPU agreement became effective in UK on 1 January 1922.

Developments in USA
At this stage our attention must turn to activity in the USA since 1901, when Arthur Pitney, employed by a wallpaper company, devised a machine to reduce the stealing of postage stamps by employees. Basically, it was a printing machine with two counters, one registered the number of marks printed and the other, having been set to a desired number, counted down and locked the machine on reaching zero. He arranged for a
Br British Stamps

Mechanical engineer, E A Rummler, to make a prototype. In 1902 the Pitney Postal Machine Company was formed to market the machine. In 1903 it was demonstrated to the US Post Office and a machine was installed in the office of the Third Assistant Postmaster General.

In November 1903 all the office mail was processed through the machine. However, over the next few years there was little progress. In 1912 the company was renamed the American Postage Meter Company.

Somewhat parallel to these developments, Hudson Maxim (of machine-gun fame) developed a stamp cancelling machine and in 1908 formed the Universal Stamping Machine Company. In 1909 Walter Bowes (an immigrant, born in Bradford, England), joined the company as salesman. He was very successful and that summer bought the company from Hudson Maxim. In 1910 Walter Bowes introduced the cancelling machines to the British Post Office and over the next few years they became widely used throughout the country.

In October 1919 Walter Bowes and Arthur Pitney met and saw that adding a Pitney Meter to a Universal cancelling machine was the basis of a very efficient and fast meter franking machine. The result was the formation of the Pitney Bowes Postage Meter Company in 1920.

On 15 January 1921 the Secretary to the British Post Office received a letter from the Under-Secretary for Mines, enclosing a memorandum which had been passed to him by Mr J C Gould MP who sought an appointment with the Secretary to the Post Office. Pitney Bowes knew the ways of Government! The memorandum described the Pitney Bowes machine in detail—up to 300 letters franked per minute, continuous recording of the number of francs printed so the user has a constant check on postage costs. It was manufactured by a company already well-known to the British Post Office and based on a cancelling machine with which they were already familiar.

The requested meeting was held within a day and confirmed in a letter to the Secretary from The Whitehall Distributing Company, acting as agents for the Pitney Bowes Postage Meter Company.

New Zealand discussion continues

Meanwhile, the New Zealand company carried on their discussions with the Post Office. One such, on 18 July 1921, considered whether franked mail should be posted in normal pillar boxes or handed in at a designated post office. (Not until nearly 80 years later did the Post Office have automatic machines which could check meter franks for the necessary accuracy of date and value, allowing pillar box posting.) It was also suggested that sorting could be speeded up if francs of different value had different shapes. It was mentioned that the Indian Post Office proposed to buy the machines and rent them out to users. (The first Moss Model D machine to be used commercially in India was in 1922.) The end result was to arrange for the Engineer-in-Chief to examine the machine more thoroughly than he had done hitherto. By 30 July 1921 the Engineer-in-Chief confirmed that it was well-made and that the £30 being asked was a fair price. He considered that in its present form it was quite satisfactory for an experimental trial. A few modifications were suggested including a motor-driven version.

On 8 August the company had replied by submitting suggestions for a range of value-related frank shapes. Fig 15 illustrates these (Courtesy Heritage Collections of the Post Office). On 12 November UAPFMC was informed that the Postmaster General was prepared to sanction an experimental trial, subject to certain conditions which he would set out in a further letter. Among these was that the design of the frank should show the denomination more conspicuously and the frank shapes should have greater dissimilarity than those submitted on 8 August.

On 2 December another set of designs was submitted, as illustrated in Fig 16 (Courtesy Heritage Collections of the Post Office).

Draft conditions for users of the machines were assembled in December 1921 and sent to UAPFMC; these included:
1. The machine would be rented and would require a licence.
2. The machine would be locked and sealed by a Post Office official.
3. The renter would make a deposit to cover the estimated amount of postage over the accounting period.
4. The machine would not be used for registered or express mail.
5. Frank must be applied only on to the actual material of an envelope or label.
6. The name and address of the renter to be printed at the top left-hand corner of the envelope.
7. Letters, etc must be faced and bundled and handed in to a specified post office.

Enter E H Kinnard

Mention must now be made of two brothers who were destined to make a great contribution to the running of business offices over the next few decades. They were Augustus David and Emil Hertz Klaber, born in England of parents who had emigrated from Prague in the mid-1880s. (Prague, in those days, was part of the Austro-Hungarian Empire.)

A D Klaber became the President of Roneo Ltd, of duplicator fame. In 1916 E H Klaber changed his name by deed poll to Edward Henry Kinnard. At that time he was operating a small engineering work-
shop with a very skilled toolmaker, Frank Langdon. Later in that year he purchased Pedersen’s Gauges Ltd and produced screw-cutting machines for munitions factories. It is clear that the name change from the original German did him no harm!

UAPFMC had decided to enter the UK market and needed someone on the spot to develop the New Zealand machine to suit British Post Office requirements. They approached Kinnard, who jumped at the chance to be in on the ground floor. Money was tight and to speed things up Kinnard invited Marconi Wireless Telegraph Co to form a new company. Initially, the name Postal Facilities Ltd was suggested, but not approved by the Post Office. Kinnard made several other suggestions and eventually Universal Postal Frankers Ltd was agreed and the company registered on 25 May 1922.

Shortly before that (actually on 22-2-22!), whilst in discussion with UAPFMC, Kinnard attended a meeting with Post Office officials. At this meeting he told the Post Office that he thought the Moss machine could be improved with (1) a device to lock-out after a specified number of printed frankings (2) a motor drive and (3) an automatic letter feed. The Post Office noted that these changes would make it more like the Pitney Bowes machine. Kinnard also pressed for exclusive rights if the machine could be improved with (1) a device to lock-out after a specified number of printed frankings (2) a motor drive and (3) an automatic letter feed. The Post Office expected the machines to be installed in the Engineer-in-Chief’s office for ‘expert examination—for a general demonstration’.

The Engineer-in-Chief reported on both the Pitney Bowes and the UAPFMC machines on 19 April 1922. The conclusions were based on statements, as well as the machines themselves as presented. At that time the Moss machine had not been fully developed by Kinnard. However, the result was: ‘it appears clear that the Pitney Bowes Company have a thoroughly good solution of the problems set by the larger user, that Mr Kinnard has an incompletely worked out solution of the problems set by the smaller user. It was concluded that there would be delay if either maker tried to adapt their machine to meet both markets.

Further frank designs were submitted by Mr Kinnard on 26 April, these were still the small size, as previously. On seeing them, the Controller London Postal Section (Sir Charles Sanderson) commented that there would be an advantage if a uniform frank could be agreed—perhaps as the impression used in America. It will be remembered that the Moss machine dies were mounted on a quadrant which restricted their size. However, Mr Kinnard made modifications and by 17 May was able to submit the design shown in Fig 17 (Courtesy Heritage Collections of the Post Office).

The Pitney Bowes Model A (Fig 18) was based on the Universal stamp cancelling machines and used a roller type die integral with the meter. Changing a frank value required changing the complete meter assembly illustrated in Fig 19 (Courtesy Heritage Collections of the Post Office). It was a 'single value' machine.

Fig 20 sketches the die hub and shows that, within reason, larger frank sizes could be accommodated.

Post Office approval—at last!

On 13 May a letter was sent to Kinnard stating that the Post Office would be prepared to grant a licence for use of the UAPFMC machine in the UK, provided the improvements discussed were incorporated. A similar letter was sent to W H Wheeler of Universal Stamping Machine Co, but their machine was accepted in its present form. It was also mentioned that the Post Office expected the machines to be manufactured in the UK within a reasonable period. In both cases the granting of a licence depended on approval of the frank design.

In the event, frank designs were approved on 9 June 1922. The accepted designs of Pitney Bowes and UPF are shown in Figs 21 and 22 respectively (Courtesy of the Post Office).
Heritage Collections of the Post Office. The machine numbers shown may have been an actual one in the case of Pitney Bowes (273 is very close to the 300 US machines mentioned earlier). The mark on the specimen submitted by UPF was not from a meter machine but was separately printed in the normal manner. It is suggested, by the writer, that the number 57 may have been Mr Kinnard’s age at the time.

On 19 July 1922 The Inland Post Warrant 1903 was amended to allow impressions of stamping machines working under the direction or by permission of the Postmaster General. This came into effect on 1 August 1922. The first licence, A1, was issued to the makers, Universal Stamping Machine Co (letter dated 28 July 1922). The London subsidiary of the Pitney Bowes Postage Meter Company, named Postage Meters & Machines Company, was established at about this time.

The initially proposed prefix ‘A’ was dropped on dies for normal postal use. The second licence, A2, and the first for a commercial machine was issued to the Prudential Assurance Company on 16 August 1922, details of this and other early machines will be the subject of the next article. Postmasters were notified about meter franking machines in the Post Office Circular dated 23 August 1922.

Universal Postal Frankers were not idle during this period and a further prototype was quickly developed to include all the modifications required. The licence for its use was granted on 11 October 1922. The first use on ‘live’ mail was on wrappers for the monthly Philatelic Magazine on 18 October 1922. This was published by Harris Publications; Albert Harris, who owned the company, showed a lot of interest in meter franking and later produced the first UK catalogue of franks. Fig 25 shows the front of the wrapper which includes the meter mark and a note explaining it. The frank is in red ink and the town mark some distance to the left is in black.

The next article will take the story forward over the following three years, during which new models appeared in quick succession to meet the evolving demand.