



A NEW BRITISH TYPEWRITER

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A NEW BRITISH-DESIGNED typewriter has just been launched. Such an event is of very rare occurrence. Since 1873, when that far-sighted American business man, James Densmore, managed to persuade E. Remington & Sons, the small-arms and sewing-machine makers, to undertake the manufacture of 1,000 of Christopher Latham Sholes's recently perfected writing-machines, the design and manufacture of typewriters has remained overwhelmingly in American hands. Most of the numerous typewriter companies subsequently incorporated in Great Britain have been of United States origin, a notable exception being the Imperial Typewriter Company formed in 1908. Indeed, the design of almost all the world's typewriters has been based on copies of American inventions mainly at the Remington and Underwood Co's.

Diagrams: Number 79

1. The Underwood No. 1 of 1897 with its fully visible writing-substance movement, with associated machine, over-shoe carriage, escapement, vibrator and other features, created a formula which ever since has been more or less closely followed by manufacturers of standard office machines all over the world. (Reproduced from 'The History and Development of Typewriters', H.M.S.O.)

In 1939 American manufacturers were supplying in the region of 90 per cent of Europe's typewriters. The drying up of this trade due to the post-war restrictions on dollar imports has therefore left a huge unsatisfied demand which has stimulated the development of indigenous supplies. The latest European design, by Byron Business Machines, commands attention for a variety of reasons. It is new, not only in general appearance, but also in important mechanical principles. It is the product of new men in a new firm. It is claimed to be all-British in conception and execution.

In its extreme form this claim is impossible to substantiate but difficult to refute. The typewriter world is one in which patents, designs, personnel and capital are licensed, copied, sub-let and inter-invested to an extent which completely baffles the outside observer. Byron itself attaches its name to machines which are made abroad and which appear to be absolutely identical with others also sold here under different manufacturers' names. The broader claim is therefore best left unsupported.

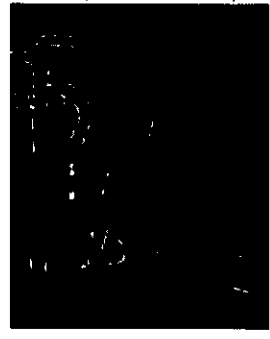
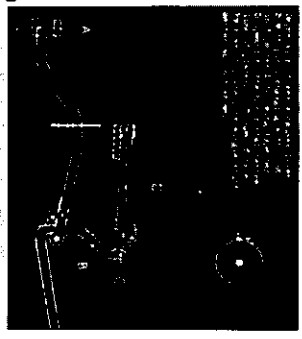
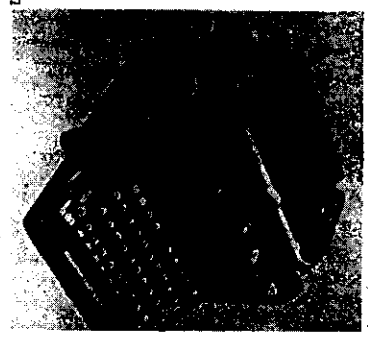
New men at the top

Byron Business Machines is descended from the Barlock Company which was registered in England in 1923, but which took its inspiration on licence from the Columbia Typewriter Manufacturing Company of Newport, U.S.A. Columbia had made the first 'Barlock' in 1889. Today, however, the link is no more than historical. The ownership of the old Barlock Company recently changed hands and when it was reborn as Byron Business Machines in 1933 the re-organisation left few survivors. The new men are almost all under 40 years of age and are keen to make a completely fresh start.

The new Byron is a comprehensive product for the more expensive end of the current range of office machines. It is hoped that it will capture a corner in the United States domestic market where

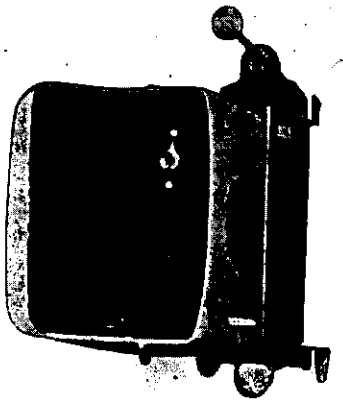
2. This schematic diagram, based on the Underwood, shows the type of key mechanism which has been so widely adopted. (Reproduced from 'The History and Development of Typewriters', H.M.S.O.)

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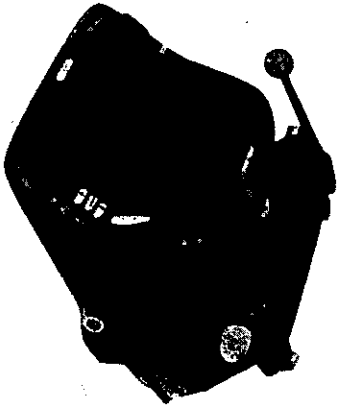


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4. The new Byron key-lever mechanism incorporates a curved roller, pivoted at the bottom to the finger-key lever and sliding in the top to the type bar. At the lower end of the roller is a pointed detent, which is held in place by the long finger-key lever, the curved roller rolls past the point of the detent and then gives the spring end of the roller a controlled movement, which is the basis of the key-lever mechanism of the type bar. It is essential that the roller should be fully depressed.



The first prototype for the Byron machine was advantageously styled and incorporated a number of improvements. It is perhaps a pity that so many of its features have been lost in the return to the more modern design of the final version.



The ball model for the second prototype shows a stage in the transition to the final version. The ball-shaped line of the control buttons and novel features have been made of the control buttons, but the casing has reverted to the rectangular form popular in other modern designs.



The second prototype in which the keyboard and casing retained their final form is shown in this model. The ball-shaped line of the control buttons and novel features have been made of the control buttons, but the casing has reverted to the rectangular form popular in other modern designs.



In the latest version of the Byron the white balls have been replaced by a special handle and conventional pattern keys. The keyboard is of a special design and the control buttons are of a special design, which are also pleasing.

higher production costs are tending to reverse the traditional import-export pattern.

On first acquaintance it is an impressive machine. Its massive appearance is mainly due to the provision of extra space within the casing for carbon ribbon mechanism and to allow for the introduction of a similar but electrified version of the machine at a later date. Herbert Norman James, the industrial designer who was called in as consultant, has evolved a pleasing form which is also attractive when seen from the viewpoint of a visitor waiting at the wrong side of the office desk. The boat-like curves of the base pan where it disappears from view beneath the machine and the keyboard surrounds are especially satisfying. The keyboard has been planned to make the most of the standard maximum of 46 keys, and all the modern devices which can be added to this type of machine have been included. Prominent amongst these and popular with those who have tried the machine, are the rapid-feed handle which loads the paper directly to the typing position, a lock and key, an eraser pencil, and a button so-gross when two keys have jammed.

'Flattering' controls

The plurality of buttons has been carried a stage too far. At one side of the keyboard is a set of three buttons to control the ribbon colour change. To balance this on the other side there is another set of three buttons to control the closeness of the trans-

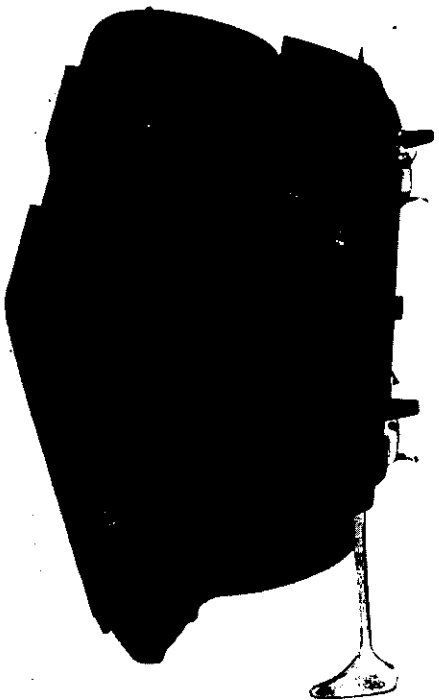
parent card clip to the platen. There is no more excuse for the use of three separate buttons to provide three

manually exclusive conditions such as "red-stencil-black" on a typewriter, than there is for four separate buttons marked "high-medium-low-off" controlling the hot-plate of an electric cooker. The recent deplorable tendency to incorporate such features in several types of appliance is apparently due to a desire to flatter the user by giving her the sensation of operating a complicated control desk that is incomprehensible to the humbler onlooker.

The main interest of the Byron, however, is beyond its keyboard. Most typewriter models are based on mechanisms evolved 50 or 60 years ago. In 1897 a design by Franz X. Wagner was manufactured as the "Underwood No. 1", and established a formula which has been more or less closely followed in standard office machines ever since. The new Byron makes significant departures from this tradition by including a unique type-lever movement and a new carriage arrangement to make the writing fully visible. The patent applications name F. S. Hardy as the true and first inventor of this printing mechanism, but the complete design was carried into effect by Dennis Whitehead, who formerly assisted and later succeeded Mr Hardy as Byron's design and research engineer, with Mr James the design consultant in almost continual attendance.

On field test, the new Byron machine was well greeted by typists, but only protracted experience

will prove whether or not it rises to the great expectations of its authors. At least it shows a spirit of adventure which is all too rare. Let us hope that it may prove an effective counter to the German, Italian and Scandinavian machines which threaten to dominate the British home and export markets.



The Byron typewriter is unusually attractive from the often neglected rear view. The five-fingered line head is a five-fingered and the semi-rotated form is a novel control. The large, single-surfaced cellular rubber feet have a motion effect on the table surface, although at 40 lb the machine is not easily pushed around.