

THE ELLIOTT BOOK-TYPEWRITER.

As soon as the ordinary typewriter came into general use and proved indispensable for letter-writing, it was only a question of time when a machine would be built which could be successfully used for type-writing in books. It was not long before a typewriter meeting these requirements was put on the market, and its widespread popularity proves its efficiency. The machine has opened up a new field and does all that can be done by an ordinary machine, as well as work that cannot be accomplished without its means. It will write on books of any size and shape, and is desirable for record books, sale books and the like. Its name, the Elliott Book-Typewriter is, however, misleading, for aside from its value in book work, it will do also, and just as quickly, all the work that the or-

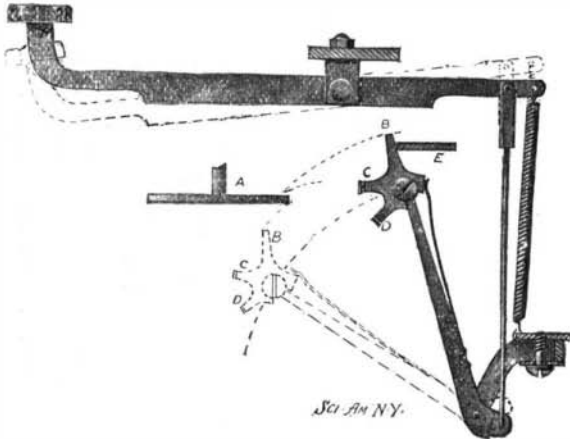


Fig. 2.—THE "SHIFT" MECHANISM.

inary typewriter does. Its value in manifolding is particularly worthy of notice. The sheets are laid on a flat platen and the type bars strike downward, giving a firm, heavy blow, producing as many as twenty legible copies. It is equipped also with a tabulating device which automatically locates the column and the decimal point in the column.

A table is provided for use with the machine, which table, while not in any sense essential to the proper working of the typewriter, is nevertheless a great convenience for writing in books. Two spring-platforms are mounted to travel lengthwise along the center of the table, and are adapted to support the open book, bringing it to a proper level. The weight of the book adjusts these platforms automatically, so that if an entry is to be made in the front of the book, for instance, the right-hand platform depresses to a point which levels the thick with the thin portion of the book. Before placing the book on the platforms the machine is raised to a vertical position on hinges at the rear, thus giving access to the table. The platen is now brought down and the page upon which the writing is to be done is brought over onto it. Then the machine is lowered and the platen frame holds the paper securely in place and ready for the writing.

The book-typewriter differs from others in this respect, namely that the paper is stationary and the whole writing mechanism or carriage moves over its surface, traveling on rollers at the front and rear. The rear rollers are in pairs, oppositely disposed on the carriage guide-rod and have concave peripheries adapted to fit the surface. Width of margin is regulated by collar-stops on this guide-rod which limit the lateral motion of the carriage. A bell is secured to the right collar-stop, and is rung automatically at the end of every line. The carriage is fed laterally under tension of the band spring by a ratchet escapement mechanism which permits the intermittent rotation of a gear wheel traveling along the rack on the guide rod. This escapement is of course operated by the finger and space keys. The whole escapement mechanism is pivoted to swing upward when the release-lever is operated, thus disengaging the escapement-gear from the rack and permitting free lateral movement of the carriage. As soon as the line is completed the entire machine is fed forward on the platen-frame by pressing together the two levers on the right. The width of space can be regulated by shifting a small thumb-screw just above the rear spacing lever. If desired the front spacing lever may be locked out of engagement with the rack on the platen frame, permitting the machine to be moved rapidly to any desired spacing.

The type-bars of this machine are one-third shorter than the standard typewriter and, therefore, permit

a much shorter key-stroke, and consequently a much higher writing speed. The universal keyboard is used. The type-bars are arranged in a circle and are each provided with a type-head having two types, either of which can be operated by striking a single key. Our second illustration shows the ingenious device by which the capital character situated at *D* may be brought into the printing position instead of the lower case character situated at *C*. A disk, *A*, is situated in the center of the type-bar circle, and when the "Caps" key, at the left of the keyboard, is depressed, this disk is lowered sufficiently to engage the arm, *B*, on the type-head, thus rotating it and bringing the character at *D* into the writing position. A flat spring rests against the type-head and holds it securely in either of its two positions. On the return of the type-bar the arm, *B*, strikes a ring, *E*, which returns the type-head to its normal position. Means are also provided for locking the spacing disk in its lower position.

The indelible ribbon used in this machine is unaffected by acids or climatic influences and cannot be blurred by a wet cloth. It is wound on two spools, one at each side of the carriage and is fed through a fork which holds down the paper at the writing point. This fork may be operated by depressing a lever back of the keyboard, to raise the ribbon and expose the writing to view.

A very important feature of this machine is the tabulating attachment which permits the operator to jump the carriage from the last character written on a column to the exact place where the writing is to begin in the next column. A scale runs along the back of the machine and its graduations correspond to those of a scale which rests against the paper. An indicator on the upper scale points always to the point which will be occupied by the next letter struck. On this upper scale is a set of tabulator stops which can easily be snapped on or off. These may be located according to the position and number of columns desired, which is quickly done by comparing the two scales. Just above the keyboard are located eight keys which are employed in jumping the carriage from column to column. Now, if, for instance, the number to be written in a column be expressed in five figures, or ten thousands, the fifth key from the left is depressed, which lifts the escapement mechanism out of mesh with the rack and at the same time presents a lever against the next tabulator stop, which halts the carriage five spaces from the right edge of the corresponding column. By this method the operator can speedily and unerringly write his figures in their proper positions so that units will always appear directly below units, tens below tens, etc. The value of this attachment is very apparent to railroads, insurance companies and others whose work largely consists of figures and tabulated work. The machine is built by the Elliott-Hatch Book-Typewriter Company, of 256 Broadway, New York city.

A New Ocean Record.

By the narrow margin of 0.02 of a knot the hourly speed record for the Atlantic Ocean, held by the Hamburg-American liner "Deutschland," was broken by the

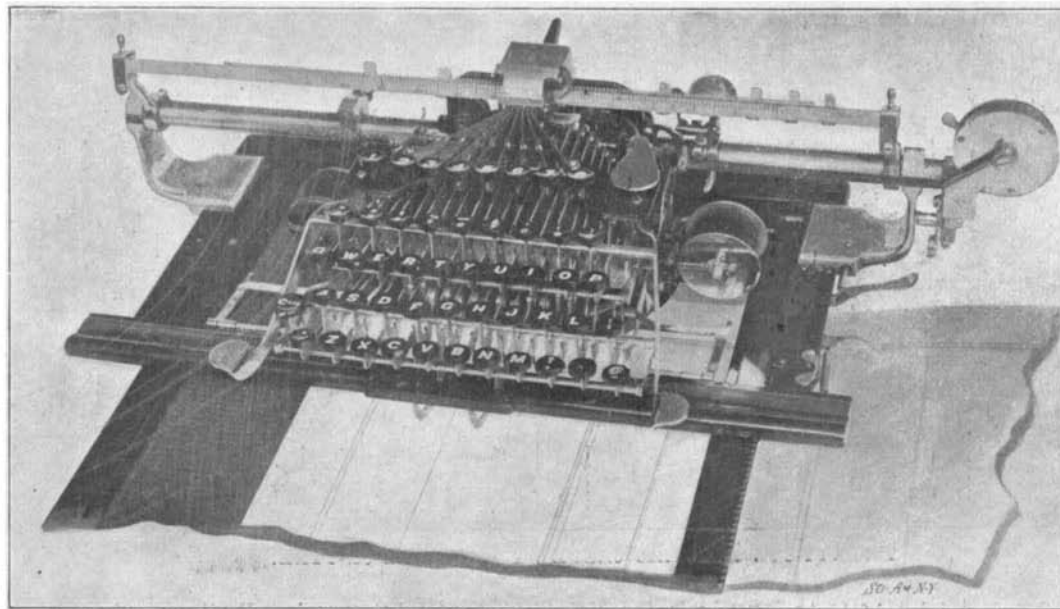


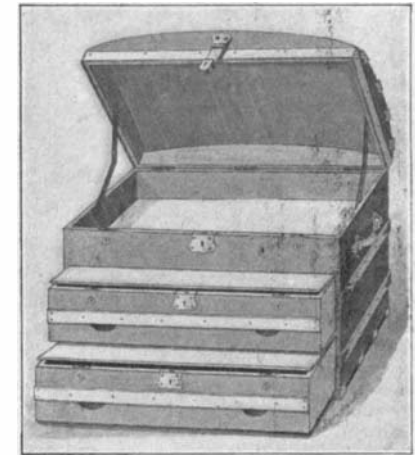
Fig. 1.—THE ELLIOTT-HATCH TYPEWRITER.

"Kronprinz Wilhelm." On this record-breaking trip, the "Kronprinz Wilhelm" covered the distance of 3,095 miles from New York to Plymouth in 5 days 11 hours and 32 minutes, at an average hourly speed of 25.53 knots. Her daily runs were 434, 550, 535, 534, 552 and 490 miles. This is the best eastward record for speed thus far made across the Atlantic.

The torpedo boat "Wilkes" completed her trial trip off Newport, R. I., June 6, and over the measured mile course made a speed of over 26 knots.

A NEW FORM OF TRUNK.

Now that the summer season is at hand, and our visions of mountain and ocean scenery or a quiet vacation in the country are about to be realized, it is time for us to come down to the irksome details of preparation for the trip. The packing of a trunk is always a nuisance, and unless one does the work systematically, considerable annoyance will be experienced. Articles not desired on the trip must be packed at the bottom of the trunk, and those that will be in immediate demand should occupy convenient places at the top. But even with the most careful planning one is apt to want in a great hurry some article packed at the bottom of the trunk, and before long confusion and disorder prevail, resulting in ruffled and



COMBINATION BUREAU AND TRUNK.

wrinkled clothing. Those who have experienced these troubles will take a great interest in the trunk here illustrated, which is the invention of Mr. Braine Walsh, of Lansingburg, N. Y. This trunk is essentially a chest of drawers so constructed and braced as to withstand the wear and tear of transportation. It will be seen at a glance that this arrangement facilitates packing and unpacking, and furthermore provides easy access to the contents. A person does not need to disarrange everything in his trunk while making a hasty search for some small article; for, since his outfit is packed in drawers of comparatively shallow depth, a cursory glance, or at most a short search, would reveal the desired article. Another great advantage of this trunk is that its contents will not be marred in packing. Ordinarily the bottom layer of goods must bear the weight of all the rest of the outfit, which results in crushing and creasing of delicate dresses, hats, and the like. The lids shown in the illustration serve to prevent a tightly-packed drawer from sticking when opening or shutting, and also provide an efficient protection against the dirt and dust. Three locks are provided for the cover and for each drawer, while strong metal battens brace the trunk against all rough usage. Between the back of each drawer and the rear wall of the trunk are rubber buffers, which will take any shock or pressure on the drawer front. Recesses beneath and back of the front battens form handholds for easy manipulation of the drawers. The entire construction, it will be seen, eliminates all the disadvantages of the ordinary trunk and furthermore, embraces new features which should prove indispensable to the traveler.

Roman Remains of Great Value Unearthed.

During the course of some excavations on a mound in the neighborhood of Greenwich Observatory, London, some Roman remains of great value and interest have been unearthed. About two feet below the surface the floor of a Roman room with a great portion of the tessellated pavement intact was revealed. Under careful treatment the beautiful work in cubes of red tile was disclosed, and the space has now been railed off, in

order that the public may view the remains. A fine collection of coins of the period of Hadrian and Constantine was also discovered, together with several pieces of beautifully figured pottery and ornamental wall plaster. The coins were in a state of remarkable preservation, the figures and inscriptions being in some instances almost as clear and distinct as those at present in use. The discoveries are regarded as important, for the reason that they prove that the Roman road from London to Dover led through what is now Greenwich Park.