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**CHAPTER - II**  
**THE ART OF TYPEWRITING**

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## 2.1 Introduction:

Typewriting is a common job in modern offices, so we talk least about it. But now-a-days, it has got very much importance in business field. We cannot imagine an efficient written communication without a typewriter. When one visualises a medium or large business office, one has a picture of a smart lady typist at first instance. For neat, legible and systematic correspondence, the typewriter proves to be much useful. At the same time, it is useful for getting five to six copies at a time. It is useful for cyclostyling work also. So many modifications in the typewriter have come into practice today. Electric typewriter provides more than twenty copies at a time and is good for stencil-cutting also. There are various types of machines and typewriters with additional attachments. Most typewriters in the market today are excellent machines and have many common features which are recognised as a standard equipment. The art of shorthand cannot exist without a typewriter and a typist. A stenographer takes down the dictation from the boss in shorthand and transcribes it with the help of a typewriter. For transcribing the matter on a dictating machine, it requires a 'typing pool'.

There are two alternatives to arranging the typing work in large organizations. The typists or stenographers may be assigned the work of a particular department, say purchase or sales. The other alternative to arranging the work is forming a 'pool', in which case, the typists and the stenographers work in a separate section under supervision and carry out the work of the organization. If we apply the departmental typing, we can

have special technical knowledge by which the departmental work can be handled more efficiently. An employee develops a sense of departmental loyalty and makes a sincere effort in his work to keep up the good name of the department. The stenographers must have intimate knowledge of the likes and the dislikes of the officers. They should also be available to the officers at a short notice. But the greatest drawback of this alternative is that the typing work is not evenly shared by the typists and the stenographers. As a result, the departmental arrangement becomes uneconomic, requiring a large number of stenographers and typists. If we use 'noiseless' typewriters, it is also disturbing to the work of others on account of the 'noise' it creates.

For removing the drawbacks of the departmental typing and obtaining the most economical use of typists and stenographers, a typing or stenographic pool can be arranged. The typing and stenographic services are then arranged conveniently from one central place. Below mentioned advantages can be obtained by using the typing pool system:

- 1) Equal work can be assigned to all the typists, which reduces conflicts among them;
- 2) Economy of time and money can be achieved;
- 3) No disturbance to other Departments, efficiency of the business organization can be enhanced to a large extent;
- 4) Better training for junior typists, specialisation can be brought about as well as better supervision of typing work is possible;

- 5) Appraisal of typists and stenographers can be made on more rational basis;
- 6) Stenographers or typists attached to particular executives may undertake the work of the respective officers and yet continue to be in the 'pool' to undertake general work whenever they are free to do so. Confidential work of the executives can also be assigned to particular typists when necessary;

Typing and Stenographic pool system is also not free from its drawbacks. It loses departmental loyalty as well as quality of the work may also suffer for the lack of expert knowledge of the work and the lack of familiarity with technical words.

Thus, the job of typewriting can be done by above mentioned methods. Whatever method is followed, following benefits are obtained by using a typewriter:-

- 1) Neat, legible and systematic correspondence and effective communication can be achieved;
- 2) Good communication is helpful for maintaining the status and goodwill of the business enterprise;
- 3) Time and labour of the employees can be saved to a large extent;
- 4) Uniformity in lettering, proforma and structure can be maintained;
- 5) Economy in expenditure can be achieved;
- 6) Monotony of and the fatigue resulting from the work can be reduced. Employees get satisfaction by employing such

labour saving devices which leads to motivate the office staff.

6) By using typewriters with special devices and attachments, accuracy of work especially in accounting, computations and statistical tables can be achieved. There is a little need for manual checking and rechecking which again implies saving in the requirement of the supervisory staff.

writing: Social advantages derived from the art of type-

- 1) Efficiency in administrative work can be enhanced;
- 2) Major device for self-employment with very small amount of capital requirements;
- 3) Socially the changes brought by the typewriters have been even more noteworthy. The majority of the stenographers and typists are women, and in all Western countries, it was the typewriter that first opened to women the doors of business life.

## 2.2 Evolution of the 'Art of Typewriting':

The evolution of the art of typewriting is quite interesting. The stress was given on neat and exact printing instead of speed of typing. Application of standard keyboard is quite recent improvement in it. The first model of a typewriter was made on January 7, 1714, by an English technician Henry Mill. The intention behind it was whereby all writing whatever may be engrossed in paper or parchment so neat and exact as not to be distinguished from print. No model is available of such machine today. In

France, attempts were made to construct such machine for blinds in 1784. The first U.S. model was constructed in 1829 by William Austin Burt of Detroit. It was called 'typewriter'. In this model, paper remained stationary and only the type circulated within a semi-circular frame. The only model of this machine was destroyed by fire in 1836 (Fig.1).

Attempts were made towards improvement in 19th century. The machines were such as pianos in respect of shape and size. They were complicated and were of too much large size. Quality of the impressions was improved at a considerable rate, but its speed was slower than manual writing. Platens and cylinders were used for holding the paper. These machines were produced for blind persons so that they can read by touch. The model constructed by Charles Thurber of Worcester in 1843-45 was quite noteworthy (Fig.2). Afterwards, machines were constructed by using the principle of type-wheel in U.K. It had 36 type slugs in three rows on type wheel. Applying the same principle, Thomas Hall of Brooklyn constructed a model in 1867 (Fig.3). He used a moving stylus to select the keys through a perforated dial plate. Snoise, Carlos Glidden and Samuel W.Solue constructed many models and tried to produce a practical typewriter. On July 14, 1868, a model of the typewriter was made, which was the first efficient typewriter having more speed than the pen. Considerable improvements were made in latter models but still these were lacking in keyboard, layout, typewriter carriage and the cylinder or platen. The first completed typewriters were brought into market in 1874 under the

Fig. (1)  
Burt's Typographer,  
1829

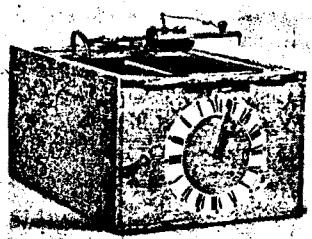


Fig. (2)  
Thurber's Printing Machine, 1843

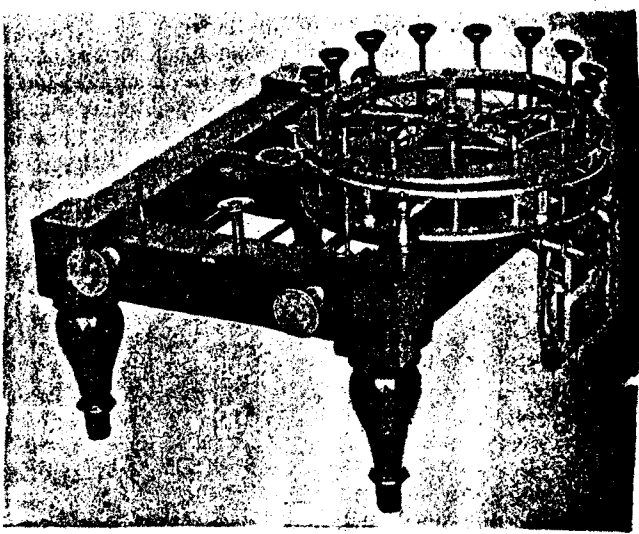


Fig. (3)  
Hall's Typographic Machine, 1867

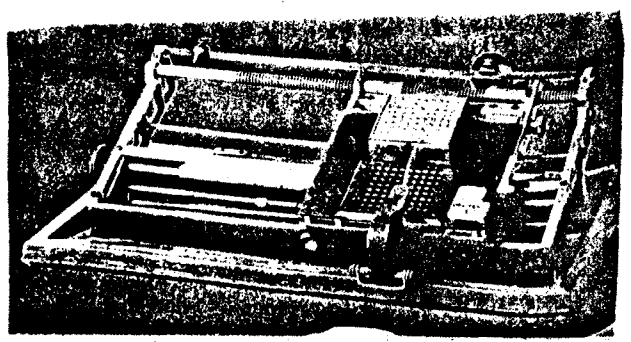


Fig. (4)  
Yost's Caligraph, 1885

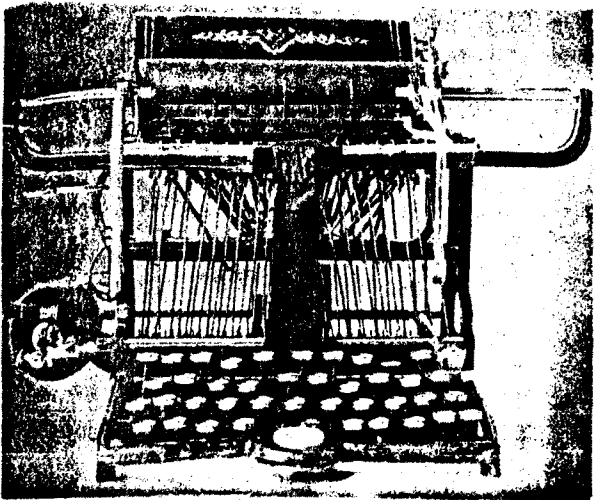
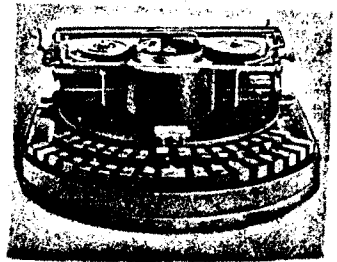
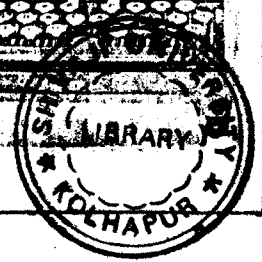


Fig. (5)  
Hammond's Machine,  
1880



(Fig. 6)  
Crandall's Printing Cylinder  
Machine, 1881



commercial name 'Remington'. Many of its improvements and additional attachments are still in vogue. Further improvements took place by retaining the basic construction unchanged.

Upto 1878, considerable development took place, but it wrote capital letters only. Without increasing the number of keys, Remington made such a provision that the use of capital and small letters were made possible by shifting a single key. It came into market in 1878 as 'Remington Model-2'. Soon after followed the so called single keyboard or double keyboard machines, which contained twice the number of keys, one for every character, whether capital or small letters. In 1885, this model was constructed by George Washington Yost, Franz X Wagner and H.L.Wagner named Caligraph (Fig.4). The single key and shift-key machines got much popular in those days. But with regard to touch typewriting, it required a compact keyboard and it was a deciding factor. Before 1890, it was operated only by skilled operators. It was accepted after a decade and after 1900 it was virtually the universal method of production. James B.Hammond of New York discovered a cylinder machine (Fig.5). It was similar to the modern Vari-Typer. A hammer was used for hitting of the back of paper, pressing it against the type cylinders. Further, Lucien s.Grandall of Groton H.7 developed a compact cylinder machine in 1881 (Fig.6). In this model, whenever a key is pressed, the cylinder shifts laterally and rotates. Thus, we came in the 20th century.



### 2.3 Types of Typewriting Machines and their Mechanism.

Due to technological improvements, changes have been made in the model as well as the total art of typewriting. Hence, a review of various types of modern typewriting machines:-

#### 1) Noiseless Typewriters:

A special type of bar is used for reducing the noise of the impact of the type bar on paper. It proves very useful when the typists work in the same room with an executive or other clerks. It can be placed near a telephone equipment also. The noiseless typewriter cannot produce as fine an impression or as many carbon copies. These typewriting machines are not completely noiseless, it is rather expensive to maintain.

#### 2) Portable Typewriters:

At the end of the 19th century, portable models of typewriting machines were introduced, but they were rather slow, backward, type-wheel machines. The first successful portable model was brought into the market in 1909 by Frank S. Rose. In the middle of 20th century, every typewriter producer produced portable typewriters. The parts are light in weight and compactly arranged. Electrical operation of portable typewriters was introduced in 1956. They are ideal for personal use by business executives who often go on tours.

#### 3) Standard Typewriters:

These are most commonly used typewriting models. These are of standard size and useful for all type of correspondence, accounting work. The basic standard typewriter may be modified in

different ways to meet the special requirements. 'Remington', 'Godrej' and 'Facit' are the different makes of standard typewriters available in India.

#### 4) Electric Typewriter:

Introduction of electrical typewriter is the corner stone of progress of typewriting mechanism. In 1872, Thomas A. Edison introduced the first electrical typewriter consisting of a printing wheel as an office writing machine. James Smathers modified the older model in 1920. Yet electrical typewriters did not become popular until late 1940's. The main reason probably was that the most offices did not have enough typing work to justify the cost of an electric typewriter. Early model also had many mechanical flaws. In 1961, International Business Machines (IBM) Corporation had modified the model in various aspects. It was called as 'Selectric'. Instead of movable paper carriage, the sphere-shaped typing element moves across the paper. The motion of the element from left to right eliminates the need for a movable paper carriage (Fig.7). Following advantages can be obtained by applying electric typewriters:-

- 1) Typing speed is greater than the standard typewriters. Uniformity in impression can be brought, though the touch of fingers is erratic;
- 2) Quality of typewriting work may be improved. It reduces the fatigue and monotony of typists;
- 3) Twenty copies can be produced using the carbon papers;
- 4) They are good for stencil cutting and invoice-typing.

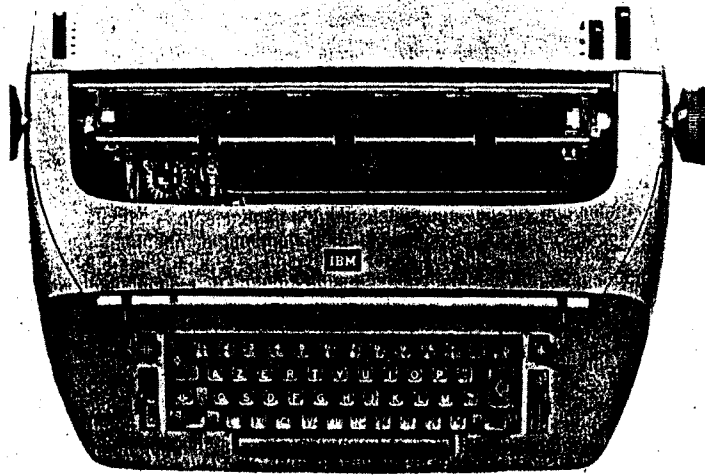


Fig. (7)

Electric Typewriter :

(It has a stationary paper carrier instead of moving carriage.)



Fig. (8)

An automatic typewriter featuring push button controls.

#### 5) Automatic Typewriters:

It consists of regular typewriters with an attachment of special mechanism. It is quite useful when a large number of letters are to be typed with slight modifications. The paper is inserted in such machine as in the usual typewriter. Then, name, address and date, etc., are typed by hand. Then, pushing a button, the machine automatically types the letter. It stops where a special fill-in is required. This is typed in by hand and pushing the button, further paragraphs are typed automatically. Sufficient place is provided for additions or any other individual matter. All paragraphing, spacing and the like are handled by the machine. It proves useful for a large quantities and similar format having slight changes only (Fig.8). The advantages of an automatic typewriter are:-

- 1) It saves in labour costs. 200 letters can be produced in a single working day. A single typewriter can do the job of 4 to 5 typists in a single day.
- 2) It saves in time. Standard matter is typed out automatically and reframing of the matter is not necessary.
- 3) It is particularly suitable when letters or circulars carrying a routine message have to be reproduced in typescript in large numbers. The standard letters give an individualistic and personal touch to each subject that is dealt with.

#### 6) Variable Type Machines:

It is called as 'vari-typers'. The main attribute of such a vari-typer is the different sizes and styles of type faces and type blocks may be interchanged according to need and

and without much difficulty. Spacing between the letters can also be adjusted by fitting a special space adjustment device on the machine. Type blocks can easily be interchanged without removing the paper from the platen, thus permitting a variety of type styles on one sheet of paper. It is specially useful when office forms and accounting statements are to be cyclostyled, requiring various styles and sizes of typesets.

#### 7) Typewriters with Additional Attachments:

For achieving special purposes, various attachments are introduced in the models of typewriting machines. For typing continuous strips of office forms, a continuous stationary attachment may be fitted to a standard typewriter. By fitting a front feed attachment to the typewriter, certain papers, for example, cheques and receipt can be inserted in the front and typed. The card holding attachment enables the operator to insert strip labels and cards in the machine and type them with ease. A typewriter fitted with a carbon roller equipment makes copies without the use of carbons.

#### 8) Special Purpose Typewriters:

Special purpose typewriters are available for special type of work, for example, tabulation, typing of scientific formulae, statistical reports, etc. The duel unit typewriter is used to type formats, tables, formulae, etc. The hectograph carbon roll typewriter is used to produce master sheets for hectographic duplicating machines. The flat bed typewriter is capable of typing directly into bound books.

### **The Mechanism:**

For obtaining a comprehensive information regarding the art of typewriting, merely the information about the various typewriting machines is not sufficient. It is always desirable to know its various parts, functioning and their respective usefulness also. First of all, let us see the various parts of a standard parts of a standard typewriter and how it contributes for neat and systematic typewriting. The various parts of a standard typing machine (excluding electrical and automatic machines) are as below (Fig.9):-

#### **1. Space Bar:**

It is useful for making space between two words, sentences, etc. It is placed in front of the keyboard. When it is pressed by right thumb, the roller moves forward by one space. Proper spacing is the soul of a good business letter. or any other circular, notice, etc. Neatness cannot be obtained without having sufficient spacing in letters.

#### **2. Shift Key:**

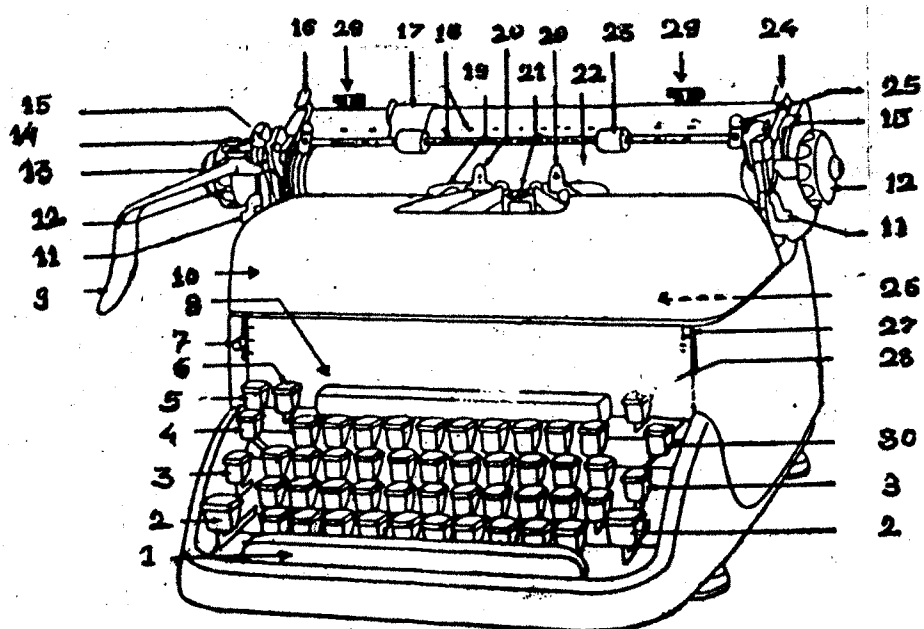
It is used for typing capital letters. Generally, two keys are used for this purpose. For typing letters on right hand, left key is to be pressed. It is only for English typewriting. There is no need for such shift keys in other languages.

#### **3. Shift Lock:**

If a matter is to be typed in all or almost all capital letters, another provision has made, i.e. shift lock. By pressing this key, one can type capital letters continuously. It can be resumed by a change key.

Fig. (9).

THE VARIOUS PARTS OF A TYPEWRITER :-



#### 4. Back Spacer:

By applying such back spacer key, the roller moves on right side instead of on the left side. It is an important part of a typewriter. It is mainly used for typing charts. If there is no demimal system in the typewriter, the back spacer key proves more useful in typing the charts, The key is also useful when there is an inadequate pressing, for making it clear, the back spacer key is used. For typing charts and doing the job attractive, it is a useful device. It is also used for typing joint letters such as œ, ±, ø, etc. The key also proves helpful in correcting the errors, i.e. accomodating four letters in the space of three letters.

#### 5. Key Releaser:

Sometimes two or more type bars overlap each other and results in hindrances in typing work. If it occurs frequently, it affets the functioning of a typewriter. For releasing such type bars, 'Key release' is used. By pressing this key, overlapped type bars can be separated. It is not available on all the typewriter models.

#### 6. Tab Clear:

For removing all tab-stops, this key is applied. Firstly, the roller is to be moved completely at left and pressing the 'tab clear', roller is pushed to right. It clears all tabs and the rolver moves directly at the right side. Some typewriters have the provision of a separate key for clearing tabs. By pressing this key, tabs can be removed. Such special provision is not available on all typewriters.



**7. Touch Controller:**

It is a special arrangement rarely found on a typewriter. For personal liking of keys, light or hard, the typist can apply it. It feels light or hard for fingers as desired.

**8. Tabular Space Bar:**

It is a very useful device for typing tables, accounts, etc. It is located at the upper side of the keyboard. Whenever such bar is pressed, the roller runs towards left and stops where the tab is set. At the right side of this space bar, there is tab stop and at the left there is tab clear. In earlier days, it was quite complicated. The typists had to use skill for tab stop and tab clear. Afterwards, it is improved.

**9. Line Space Lever:**

It is a very important part of the typewriter. It is used for spacing the lines. It should be handled with great care. If it is pushed gently, line changes. In large typewriters, there are three types of line space arrangement. In the first type, there is no space between two lines. Only such space is arranged that reader can read it at ease. Though it enables saving in papers, it does not look neat and legible. Such spacing is not used in modern commercial letters. In the second type, one line remains blank in between two lines. In the third type, two lines remain blank in between two lines. In modern models, there is an arrangement for half line also. It is applied for business letters to a large extent.

**10. Top Plate:**

It helps to look nice the typewriting model. It protects from dust, fuel, etc. It is located upon type bar and carbon ribbon. In some models, it cannot be removed completely, but generally, it can be moved completely.

**11. Roller Releaser:**

It is used for replacing the roller. In the old models, it could not be removed at ease. Tools had to be used for removing it and it was laborious work. In modern typewriters, strips are arranged on both sides of the roller. It is attached with springs. For cleaning the roller or replacing it, such roller releaser proves useful. Improvements have been made to a large extent in modern typewriters.

**12. Thumb Wheel:**

These are arranged on both the sides of the roller and are called right and left thumb wheels. With the help of thumb wheels, paper can be inserted in the typewriter. In the left wheel, variable line spacer is located. Such wheels are of attractive sizes, shapes and colours. In some models, thumb wheel is made of plastics also.

**13. Variable Line Spacer:**

It is located at near the line space lever. It is accommodated in the thumb wheel. For removing the thumb wheel, it can be used. It regulates the spacing between two lines.

**14. Line Space Regulator:**

How much space should be provided that can be arranged by line space regulator. As has been mentioned

earlier, there are three types of spacings. The typist can arrange single, double or triple line space by applying such line space regulator.

**15. Carriage Release Lever:**

It is placed at both the sides of a roller. When it is pushed downwards, it runs towards left. Though it is a useful device, it can be handled with great care. By pushing it downwards, the roller runs and strikes at the left. Frequently, application of such carriage release lever results in damage of the typewriter. While carrying it along the journey, it should be tied up properly.

**16. Ratchet Release Lever:**

At the left or right corner of the roller, a gear is fitted and by line space lever it moves by one, two and three lines. The gear is pressed by a pallet. By using ratchet release lever, the pressing of that pallet diminishes and eliminates the noise, occurring while changing lines. It proves very useful when rolled paper is applied for typewriting. The difference between variable line spacer and the ratchet release lever is that the functioning of latter and line space lever can be done simultaneously. While using the variable line spacer, the line space lever cannot be applied.

**17. Lateral Paper Guide:**

While inserting paper in the typewriter, it should be placed on a metal sheet, it is called as 'lateral paper guide'. It leads to similarly in margin space.

While typing each paper, there is no need for changing the margin space regulator.

**18. Scale:**

It is very useful while typing an advertisement. By using scale, paper can be fitted with required measurements and the job of typewriting can be done by prescribed measurements. Neatness can be brought by the scale.

**19. Line Gauge:**

This strip is placed near the roller. Letters are being typed according to the lines of the strip. This is mainly used for replacing the paper which has been withdrawn from the typewriter.

**20. Card Holders:**

For typing on thick paper, there must be sufficient pressure. It is provided by such card holder. Typewriting does not become attractive and neat in the absence of such mechanism. It also reduces the noise of a typewriter.

**21. Type Guide:**

The typebar strikes on the roller at a particular place. If the particular place is widened, the level of letters spoils and the typing job looks bad. In such condition, it should be replaced by a technician. In Marathi typewriter, there are two types of 'type guides', one is applied for vowels and the other for consonents.

**22. Roller:**

The type bars strike on a particular rod, it is called as 'roller'. It consists of two parts. The inner part of the roller is made of wood or metal. If wooden mate-

-rial is used, it loses its shape, damages sooner and spoils the typewriting job. In modern typewriter, the inner part of the roller is made up of metal only. The outer part of the roller is made up of rubber or such other soft materials. It is available in soft, medium or hard rubber. It can be changed whenever required. For producing carbon copies, hard roller should be used. But for a single copy, it would be advisable to use soft roller. The gear, thumb wheel, variable liner spacer, line space regulator are all attached to the roller. For better typing work, it contributes much.

**23. Paper Bails:**

While typing the paper laps on the keyboard and creates disturbances in typing work. For this purpose, paper bails are mainly used. It is made up of rubber, plastic or metal.

**24. Paper Release Lever:**

It is mainly used for loosening the paper which has been inserted into the typewriter. By loosening the paper inserted by paper releaser level, paper can be readjusted. After readjusting the paper, the key must be kept as it was.

**25. Paper Bail Rod:**

On the specific rod, the paper bail is placed is called as 'paper bail rod'. After inserting the paper into the typing machine, the rod may be placed which lessens the noise of the typewriter and minimises the lapping of the paper on the keyboard.

**26. Ribbon Reverse Lever:**

While typing, the ribbon moves from left to right or vice-versa. If the wheel at one side fills up, the direction of moving the ribbon should be changed. For that purpose, left or right hand side of the typewriter, there is a key. If it is pressed or pulled, the direction of the ribbon changes. The specific key is named as 'Ribbon Reverse Lever'. For clear impressions of the type, the ribbon and the 'Ribbon Reverse Lever' should be of a better quality.

**27. Ribbon Indicator:**

For various models of typewriters, it should be placed at the left, right or elsewhere. While typing, the key should be placed at black and blue ribbon, if it is placed at white, ribbon does not function. Only the type bars strike on the rod. For cutting stencils, the key should be placed at white ribbon. If the ribbon is of double-colour, letters can be typed in red ink by placing the key on red ribbon.

**28. Tab Stop:**

It proves useful for typing charts and tables: The roller should be brought at the required specific points and tab stop is pressed. Then the typing work can be commenced. While pressing the tabulator space bar, the roller moves for particular distance and stops. For another figure and columns, the tabulator space bar and tab stop can be used. Decimal system should be applied for tab stop. For typing complicated and large charts, the decimal system of tab stop proves useful.

**29. Margin Stoppers:**

For maintaining adequate margin at left and right sides of the paper, the margin stopper is used. Generally, the left hand margin is set by left hand margin stopper. In some typewriter models like Underwood or Remington-17, the margin stopper is used.

**30. Margin Release Lever:**

While pressing the key, the roller moves towards left or right hand side of the margin stoppers. At the end of the line, the bell rings and the roller stops. Whenever a word or a sentence is incomplete at the end of the line, by pressing the margin release lever, 5 to 7 additional letters can be typed. By using such margin release lever, typing can be done outside the margin. This key should be applied in critical situation only, because though additional letters are typed, it loses the attractiveness.

**31. Ribbon Carrier:**

Ribbon is attached to this carrier. While typing some matters, it goes down at each stroke. Ribbon should always be kept at the black spot. If it is kept at the red spot, the carrier is lifted abnormally and the typewriter becomes overweighed from operation.

**32. Warning Bell:**

When the typing on a line comes to an end, the bell rings, at which time, the roller has come to the left side and it gives warning to the typist and enables him to complete the line within the prescribed margin. It minimises

the use of the margin release lever and makes the typed matter more systematic and attractive.

#### **The Keyboard:**

It is an important part of the typewriter. It consists of letters, figures, symbols, etc. The letters, figures, symbols, are so systematically arranged that frequently arising letters can be easily tapped by fingers. Some letters are used rarely in the matter such as 'Z', 'X', 'Q', etc. It should be arranged at last row which can be typed by the index finger. While arranging the letters on a keyboard, the depreciation of keys must take into account. The letters arising frequently should be placed at the central part of the keyboard, so that the intensity of stroke should be less and the depreciation of that letters should be minimized. Though the letter 'A' depreciates at a considerable rate, in a standard keyboard, the letters on keyboard are arranged in the manner as shown in Fig.10.

This is all about the various parts, their utility, their location, etc. For a thorough knowledge of the art of typewriting, it desirable to know about the functioning of a typewriter. How a typewriter runs with giving movements by fingers and by running such typewriter, desired matter is typed in a systematic manner is an interesting issue. Hence, a few words regarding the functioning of a typewriter:

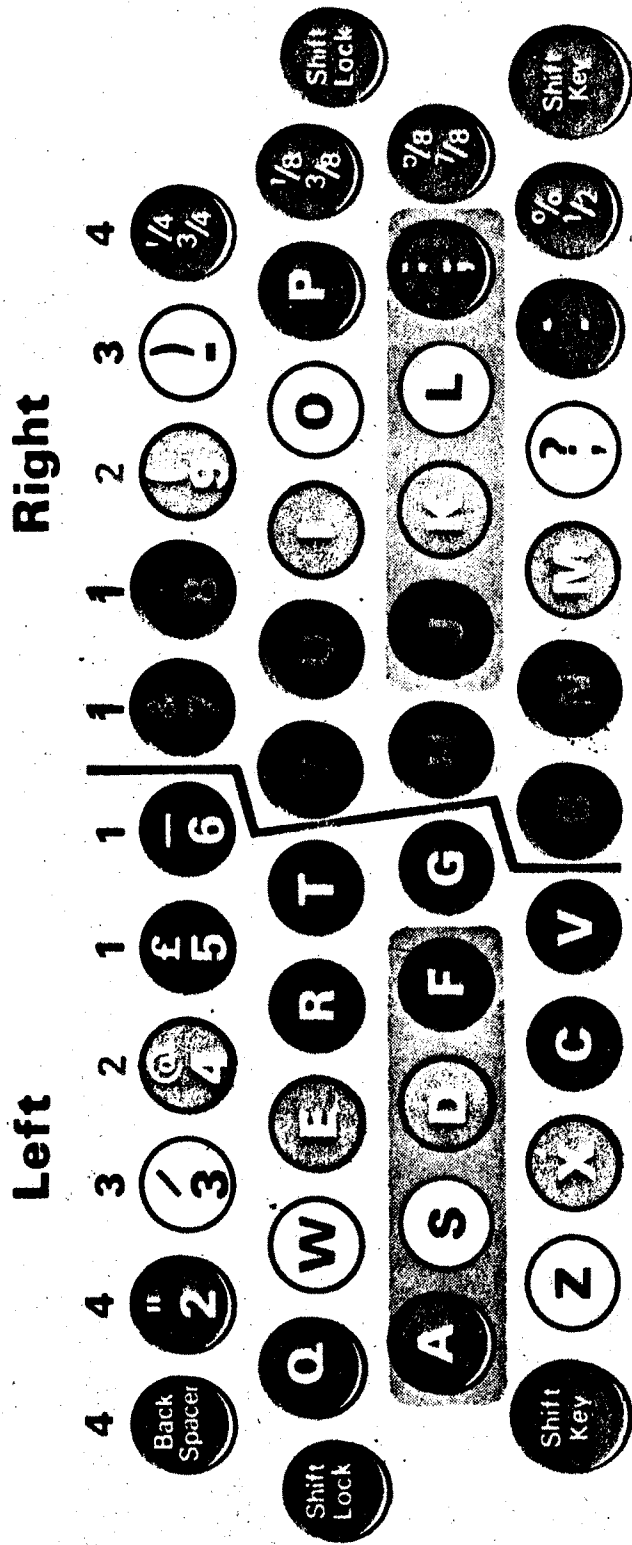
#### **The Functioning of a Typewriter:**

Whenever a typist operates a typewriter, he makes a stroke on a key. At that time, the type bar moves by a semi-



# Diagram of Typewriter Keyboard

(Horizontal Method)



circular direction and strikes on the roller, carbon ribbon erects to some extent and the letter is being typed. Simultaneously, the roller moves at left side by one space, ribbon wheel rotates on left or right side. There are three main operations, viz:

- 1) Letters are placed on knobs, knobs are attached with vertical strips and those strips are attached to type bars. As a result, when a key is pressed, type bar moves towards the roller;
- 2) Type bars are attached to a semi-circular part. Behind that part, a semi-circular strip is placed. When a type bar moves towards the roller, the semi-circular strip moves back and the movable and immovable regulator moves and the rollers proceed by one space by an attached spring. If the regulators depreciate the roller moves at left by many spaces at once. At that time, the regulators must be changed. The roller is attached with a belt by right hand to left hand. The belt is attached to the drum which is placed at the inner part of the typewriter. In this drum, there is a large main spring. The pressure of the main spring can be increased or decreased as per requirements. After moving movable and immovable regulator by the stretch of the main spring, the roller moves by one space only. If the main spring has been provided with more stretch. The roller of a typewriter moves with additional pressure. Therefore, the main spring has been provided with sufficient stretch only.
- 3) A gear is attached to the drum. The gears overlap each other. By the movement of such gears, the carbon wheel rotates.

When the roller moves by one space, the ribbon rotates. By moving ribbon reverse lever, the direction of ribbon can be changed. In modern models of typewriters, there is an arrangement for auto resuming movement. For this purpose, an eyelet is provided.

At the lower part of the letter strips, a horizontal large strip is attached. When a key is pressed, the large strip also is pressed and by the attached mechanism, the ribbon carrier erects and the type bars strikes on the roller and the letter is impressed on the paper.

#### **Touch Typewriting:**

One of the issue of the art of typewriting is the touch typewriting. At the earlier stage, typewriting has been done by two fingers only. It was very complicated method.

In modern typewriter models, all fingers are used except left hand thumb. So it is called as 'nine-fingers system'. Typing is done without looking at the keyboard. It is called as 'touch system' or 'blind fold system'. In this system, fingers are continuously placed on the keys for letters A,S,D,F, H,J,K,L,;. It is called as 'guide line'. While typing letters on upper or lower lines, fingers are shifted to such lines and then placed with usual guide line. This touch typewriting is used universally. Training is imparted in all typewriting institutes by touch typewriting method.

#### 2.4 The Art of Typewriting - A Useful Means for Self-Employment:

The art of typewriting proves useful for getting a job as well as for self employment. It contributes to lessen the severity of the unemployment problem. Though a huge amount can not be accumulated through performing job work, it is useful for maintaining one's family. This issue can be studied in two different ways, i.e. (i) establishing typewriting institutes, (ii) buying a typewriter and doing various types of job work, cyclostyling and such related work.

##### Establishing a Typewriting Institute:

Establishing a typewriting institute is a complex as well as time consuming task. The entrepreneur should have that sort of talent. He must be a good administrator and should motivate the younger generation towards commercial aptitudes. He must be punctual, of disciplinary nature and rather strict regarding money matters. He should deal with Bureau of the Government Commercial Examinations and the Administrative Officer (A.O.) at district level. He should keep the necessary records upto date. He should be a good teacher. He should impart the knowledge skillfully to the candidates. Educational institutions should take lead in this regard because they can deal with administrative work smoothly. But these institutions suffer from the lack of commercial approach. Though it is not a money making business, but due care should be taken regarding prevention of huge losses. Commercial tactics should be applied for the survival of such institutes. Individual entrepreneurs have the commercial approach but they are afraid

of dealing with the concerned administrative offices. Keeping upto date records, correspondence, attendance registers, maintaining discipline are such matters that are felt as some sort of headaches by the individual entrepreneurs.

Summarily, we can say that establishing a typewriting institute is not an easy task. From among those passing the G.C.C. examinations, a very few candidates can successfully establish typewriting institutes. Individual entrepreneurs come forward to establish typewriting institutes rather than the educational institutions.

#### **Buying a Typewriter and Performing Job Work:**

It is quite an interesting and optimistic occupation than establishing a typewriting institute. The capital required is between Rs.10,000 to 15,000. Job work can be done at a convenient and cheaper place, generally in the vicinity of the Tahsildar's office or a District or High Court. It can be extended by buying cyclostyling and photocopying machines. The main features of this profession can be enumerated as follows:-

- 1) Very small capital investment;
- 2) No need of employing a number of workers, i.e. no problems regarding personnel management;
- 3) Accuracy, neatness and speed must be maintained;
- 4) Typewriter requires very little space, if it is portable enough;
- 5) The entrepreneurs who perform their job work in the vicinity of Courts or government offices should know the

formalities and style of writing on bond papers and should be able to guide the clients in such matters;

6) More earning can be yielded whenever one original and four to five carbon copies are to be drawn. Totally five to six copies can be produced at first instance.

A press interview was taken of the entrepreneurs who used to sit in front of Nutan Marathi Vidyalaya, Pune. While conducting such interviews, the views expressed are quite noteworthy and strengthen the above mentioned statements. For good writing and its durability, the typewriting machine had been invented. An entrepreneur having six typewriting shops, of the age of thirtyfive, expressed his views as, "There will be an increasing number of unemployeds due to the increasing population. It affects adversely on getting job. Taking into consideration the above problems, I have obtained the skill of typewriting and started working before five years. It is not a huge money making business but it can deal with daily earnings. He maintains his family with the earnings from such shop.

Another entrepreneur said that the ladies can do the job neatly, efficiently and with noteworthy speed because their fingers are delicate as compared to those of gents. So, many ladies have acquired the technique and, therefore, we see more ladies in this profession. The persons who work in this profession but have no typewriter of their own, get fifty per cent of the total charges as their remuneration. Such workers earn Rupees twentyfive to thirty every day by doing such work. In this regard,

one lady stated that she is doing such jobs since she was 22. Later on, she got married and has two kids now. She maintains her family expenditure with ease with the income from this job. An entrepreneur who had recently started into this profession also gets fifty per cent of the total earnings of the day. He is waiting for an opportunity of a good job elsewhere. Due to the introduction of the photocopying machines, this profession has been affected adversely. Electric and electronic typewriters have also come into this profession. The interview concluded that it is a profession of uncertain earnings but manages one's daily bread, the main problem of millions of unemployed.

Similar businesses have been carrying on in big cities and in the vicinity of the government offices and the Courts. In Kolhapur, in front of Chhatrapati Pramila Raje Hospital, such businesses are being carried on to a large extent by many unemployed. In the Fort area of Bombay, typewriting job work is carried on to a large extent.

Preliminary interviews of the proprietors of the typewriting institutes in Kankavali Taluka have been conducted. A distinguished feature in this regard came to light that in all, there are fourteen entrepreneurs who are doing typewriting jobs. They originally acquired the typewriting skill from the various typewriting institutes in Kankavali Taluka and passed the G.C.C. examinations. Due to the introduction of photocopying machines, particularly 'Canon automatic xerox' machine, the job typewriting profession suffered badly. But three of the entrepreneurs establish-

ed cyclostyling machines and now they are thinking of buying xerox machines themselves.

From the above discussions, we can conclude that the art of typewriting is a useful means for self-employment. It should prove much useful if it is supplemented by cyclostyling and photocopying machines.

### 2.5 G.C.C.Examinations and the Curriculum:

Though the art of typewriting can be acquired merely by practice and by using the lesson-books, for a systematic study of the typewriting skill, a curriculum has been framed by the Bureau of Government Commercial Certificate Examinations, Poona. Considering the need of the industrial units and expectations from typists, the Bureau has framed a syllabus for English 30 words per minute (w.p.m.), 40 w.p.m., 50 w.p.m. and 60 w.p.m. and for Hindi, 30 w.p.m., 40 w.p.m. and for regional languages 30 w.p.m. and 40 w.p.m. examinations. Stress has been laid on the layout of business circulars, proformas for advertising, notices, memos, accounting statements and especially, the speed per minute. At each examination, it is expected that the skill, speed and versatility of the candidate should be increased and he can perform his job efficiently. For better understanding the role of the G.C.C. examinations and the typewriting institutes, we should consider the curricula of the various G.C.C.examinations.

If a candidate appears for English typewriting (30 w.p.m.), he has to type a commercial letter which consists of



180 to 185 words without any correction marks. Thirty marks are allotted to this question. In the second section, the typing speed is observed. Candidates are asked to type 210 words (1046 to 1050 strokes) within seven minutes. Forty marks are allotted to the second section. Another question is asked in Section I, i.e. typing of statistical chart. The chart consists of three columns, eight lines and five figures. Thirty marks are allotted to this second question in section I. In spite of the allotment of marks to various questions, the candidate must obtain 15 marks in section II and obtain 50 marks in total for passing this examination.

If a candidate appears for English typewriting 40 w.p.m. examination, he has to type a typed commercial letter or a company notice consisting of 250 to 255 words with standard correction marks and abbreviations. Thirty marks are allotted to question 1. The second question consists of a statistical chart excluding serial numbers and descriptive columns. It is expected that sub-columns, 50 per cent seven digits numbers with ten rows can be typed accurately by the candidate. Thirty marks are given for this question. These two questions should be completed within an hour. The second section is related to the typing speed. 280 words (1396 to 1400 strokes) are to be typed within seven minutes only. Forty marks are allotted to this section. By passing this examination, the above mentioned skill and speed can be obtained.

If a candidate appears for English typewriting (50 w.p.m.) examination, he has to type a manually written commercial letter or a tender notice consisting of 350 to 355 words with 30

standard correction marks and abbreviations. It is required to type mathematical signs. Application of shift key for capital letters and other signs is also expected in such a question. Thirty marks are allotted to this question. In the second question, a balance sheet is required to be typed with two sub-columns. In all, 30 figures are expected to be typed with nine digits and a grand total. Drawing vertical and horizontal lines is also expected in this question. Thirty marks are allotted to this question. These two questions should be completed within an hour. Section two is related to the typing speed. 350 words (1746 to 1750 strokes) are to be typed within seven minutes only. Forty marks are allotted to this section. By passing this examination, more skill and speed can be achieved.

If a candidate appears for English 60 w.p.m. examination, he has to type a manually written commercial letter of 400 to 405 words, with in all 40 standard correction marks and abbreviations. Thirty marks are allotted to this question. In the second question, a balance sheet is asked to be typed with four sub-columns, in all 35 figures having eleven digits. Candidates are expected to draw horizontal and vertical lines systematically. This examination provides highest skill and speed to the candidates. The intention behind the above mentioned detailed description is that how the G.C.C. examinations develop skill and speed of type-writing.

For passing Marathi 40 w.p.m. examination, the the candidate has to be prepared for following type of questions.

There are in all three questions in this examination. The first two questions belong to section one and the remaining question belongs to section two.

Question 1 : A commercial letter having 150 to 175 words is asked to be typed. Layout and address, paragraphs are typed applying technical knowledge in this regard. Thirty marks are allotted to this question.

Question 2 : Candidates are asked to prepare a statistical chart, having four columns, 10 lines, 50 per cent figures being of 8 digits. Thirty marks are allotted to this question.

Question 3 : This question is asked in section two. It assesses the typing speed of a candidate in seven minutes. The candidates have to type 210 words (1045 to 1050 words). Forty marks are allotted to this question.

If a comparison is to be made between English typewriting (30 w.p.m.) and Marathi typewriting (30 w.p.m.) examinations, we would find that there is no difference in respect of the number of questions, time allowed, marks allotted, etc. The difference is in the number of letters only. There are no examinations for 50 and 60 w.p.m. in Hindi and Marathi. Therefore, mentioning the nature of question paper and curricula of the examinations for English typewriting for same speeds would merely be a repetition.

This is all about the curricula and the G.C.C. examinations. But for having a clear idea about the rate of typewriting institutes in providing skilled labourforce to the business field, it is necessary to see as to how the lessons are prepared, which lead to excellence in G.C.C. examinations. It is obvious that various types of lessons are being exercised in various typewriting institutes, which are different in nature. But the general outlook and the intention behind framing such lessons are the same. For English typewriting 30 w.p.m. examination, generally, the lessons are framed in the framed in the following manner:-

For English typewriting 30 w.p.m. examination, 3½ to 4 months are available for training. Fortyfive minutes is the duration for instruction per day. Generally, 27 to 30 lessons are taught during the term. Each lesson is taught for 2 or 3 days as per the nature of the lesson. The remaining days are utilised for practising the typing speed. 3 or 4 tests are arranged during the term. With the prescribed lessons, the candidate prepares himself for the examination and gets the required skill. From the following chart, we can have an idea as to how the skill is developed through prescribed lessons:

Lesson Number	Skill provided by such Lessons
1 to 10	Typing letters and figures. Simple words.
11	Simple words using the practised letters.
12	Days, Months, Figures, etc.
13 to 14	Short passages.
15 to 17	Personal letters with very few techniques.
18 to 20	Practice for sentences with numbers.
21	Signs such as: %, ½, &, ?, @, etc.
22 to 25	Sentences with numbers and capital letters.
26	Advertisements.
27 to 30	Business Letters.
31 to 32	Practice for getting typing speed.

From the above chart, it is clear that the typing skill is provided in the following manner:-

- 1) Lesson nos.1 to 10: The first lesson for English 30 w.p.m. examination will be as below, there is no possibility of other lesson. It is universally taught and practiced in all the institutes. It is the primary and basic lesson. Sometimes, it requires four to five days also. The lesson is:

asdf ;lkj asdf ;lkj asdf ;lkj as

asdf ;lkj asdf ;lkj asdf ;lkj as

asdfgfd asdfgfd asdfgd asdfgfd a

;lkjhjk ;lkjhjk ;lkjhjk

asdfgfd ;lkjhjk asdfgfd ;lkjhjk;

In next lessons, more letters are added to the above mentioned matter. First ten lessons consist of alphabets and figures only. Sometimes, it feels boring for the candidate and the possibility of the candidate's dropping off increases. Therefore, some instructions give lessons consisting of words. From the above letters, simple words are prepared and the candidate is asked to practice them. It eliminates the monotony and the feeling of boredom among the candidates. Candidates are encouraged to learn and practice more. They are attracted towards this art.

- 2) Lesson no.11: Simple words are given for practice to the candidates.
- 3) Lesson no.12: Candidates are asked to type days, months with their serial numbers.

- 4) Lesson nos.13 to 14: Short passages excluding capital letters are asked to be practised. These generally consist of four to five lines. There are no special instructions for spacing, layout or other technical matters. Instead of merely asking the words, short passages having sets of words are asked to be typed.
- 5) Lesson nos.15 to 17: Candidates are asked to type short letters. It is just like the above mentioned short passages. Only the salutation and compliments have been included in such letters. The main intention behind such letters is to practice the letters only with slight technical knowledge.
- 6) Lesson nos.18 to 20: Again various sentences are asked to be typed with some figures. Generally, a set of 5 to 10 sentences, with serial numbers are asked to be practised.
- 7) Lesson no.21: Signs like %,  $\frac{1}{2}$ , &, ?, @ are asked to be typed for practice. Sometimes, words and sentences are linked with such signs.
- 8) Lesson nos.22 to 25: Sentences with capital letters are asked to be typed. Sometimes, a group of words and sentences having all capital letters are asked to be typed. In this stage, the candidate gets some skill of typing and can use it for performing job. But it is very limited amount of skill.
- 9) Lesson no.26: Asking for typing an advertisement is a corner stone in getting the skill of typewriting. Advertisement requires a better knowledge of spacing. Each space is to be counted and letters are to be typed in central place of

of the paper. Without measuring spaces, it cannot be done. The candidate who has a better idea regarding vertical and horizontal spacing can do such type of job. In the present syllabus of English typewriting (30 w.p.m.), it has been excluded.

- 10) Lesson nos.27 to 30: Candidates are asked to type commercial letters. It requires more practice. Proper spacing, salutation, placing of address, date, etc., are some of the components of such lessons. Candidates appearing for English typewriting (30 w.p.m.) examination are asked to type such commercial letters. Thirty marks are allotted for it. Therefore, instructors take utmost care for teaching such lessons.
- 11) Lesson nos.31 to 32: The remaining period is devoted for practising the speed of typing. Candidates are asked to type passages, counting words and strokes included in it. Time is recorded and the speed is observed. As forty marks are allotted to this question, candidates practice it seriously. Instructors cannot assist directly for improving the speed of typing. Candidates have to practice for obtaining typing speed on their own.

This is also about the lessons and how the typing skills is developed through such lessons. Similar lessons are used for practice in various typewriting institutes with slight differences. The intention behind having such lessons is the same, i.e. to develop the typing skill and preparing the candidates for the G.C.C. examinations.

**English Typewriting (40 w.p.m.) Examination:**

The period available for training is the same as English typewriting (30 w.p.m.) examination. It is rather easy to teach lessons included in this syllabus as compared to the lessons framed for English typewriting (30 w.p.m.) examination. When a candidate appears for 40 w.p.m. examination, the lessons begin with large passages, which proves useful as a revision of the lessons taught in the past year. Maximum variety can be brought in such large passages. The passages generally include capital letters, figures, abbreviations, etc. Similar lessons are framed with development in the preceding lessons. The typing skill is developed in successive lessons. In the previous examination, commercial letters have been asked to be typed. Now, in this examination, commercial letters or company notices are asked to be typewritten in an hour, which are given in manuscript with standard correction marks and fifteen abbreviations. Lessons are framed in such directions. There is a lot of difference in the lessons framed by various institutions because the lessons do not consist of letters only but also consist of commercial letters and company notices for the obvious reason that there should be a variety in the passages and lessons.

Another phase of this syllabus is preparing the candidates for framing statistical charts. Lessons are framed in such manner that the candidates can compose statistical charts with four columns, two sub-columns, seven digit figures, with ten lines, etc.



At the end of the term, some lessons are suitably framed to enable the candidate to type the matter with additional speed. Frequently arranged tests and vigorous practice are required to increase the speed of typing. We could not find out the exact quantum of such lessons due to their varied nature.

**English typewriting (50 w.p.m. and 60 w.p.m.) Examinations:**

For English typewriting (50 w.p.m. and 60 w.p.m.) examinations, the lessons are framed taking into consideration the nature of the question papers. Many books are available in this regard, providing various lessons for typewriting examinations. Instructions and the proprietors of the typewriting institutes use a variety of books and also frame various lessons as they feel proper. Therefore, it is not possible to draw an exact plan of lessons for such examinations.

A noteworthy matter in this regard is that for English typewriting (50 w.p.m. and 60 w.p.m.) examinations, manuscripts are used with correction marks, abbreviations, etc. and such lessons are difficult to frame. Generally, the instructors are used to follow the available books in this subject and impart the training to the candidates accordingly. Sometimes, plain passage is given which has to be converted into a good commercial letter or a company notice. The candidates should know the formalities of commercial letters or company notices, for typing it neatly and systematically. Summarily, we can say that for passing English typewriting (50 w.p.m. and 60 w.p.m.) examinations, only the typing skill is not sufficient but an upto date knowledge regarding busi-

ness communication is also required.

**Marathi/Hindi Typewriting  
(30 w.p.m. and 40 w.p.m.) Examinations:**

For Marathi/Hindi typewriting (30 w.p.m. and 40 w.p.m.) examinations, lessons are framed in the fashion similar to English typewriting examinations, only the language is different. Therefore, it is not necessary to narrate the plan of lessons of these examinations.

Though registration, curriculum, fees and such other important matters are considered directly by the Bureau of Government Commercial Certificates Examinations, Poona-411001, periodic inspection and in all working are under the control of the Administrative Officer (Education) at the district level, setting of questions papers, assessing the answer books, declaring results, issuing certificates and such other matters are conducted by the Bureau. The object behind it is to conduct the working of various typewriting institutes smoothly so that the students are benefitted by passing such examinations. Computerisation of the G.C.C.Examination procedure has been done recently. The Bureau of G.C.C.Examinations ensures that the various typewriting institutes work in a desired manner.

**A Brief Report of the Interview  
with Mr.Anandrao Misal:**

For obtaining practical knowledge and to know about the working of the Governmental Commercial Certificate Examinations Bureau, an interview has been conducted with Mr.Anand-  
rao Misal, President of the Maharashtra State Commerce Education

Institutes' Association and Proprietor of Anand Typewriting and Shorthand Institute, Kolhapur. Mr. Misal works as a member of the Board of Studies of the Bureau of G.C.C. Examinations, Poona, and also as a paper-setter and examiner for G.C.C. examinations.

First of all he informed that the highest typing speed achieved in 1960 was 145.09 w.p.m. Shri. P.V. Zode of Vitthal Typewriting Institute, Chandrapur, stood first in Marathi Typewriting Championship with the speed of 73.2 w.p.m. with 98% accuracy in 1986. Shri. S.K. Iyer of Asha Typewriting Institute, Jalna, stood first in English Typewriting Championship with the speed of 86.7 w.p.m. with 98.5% accuracy in 1986.

He informed regarding the art of drawing pictures with the help of a typewriter. For drawing such a picture, a sketch has to be drawn first on a tracing paper, measurements have to be taken and with the help of a typewriter key (generally 'x'), the picture is finally drawn. This art has received good recognition these days. A television interview was conducted with such an artist recently.

Discussions were then conducted on the issue of curriculum of the G.C.C. examinations, paper setting and assessment, etc. Mr. Misal strongly and firmly expressed his views in this regard. He very much criticised the method of paper setting. According to him, the present paper setters are aloof from the technical formalities of typewriting. They lack educational approach. Some paper setters even do not have any knowledge of typewriting. They are directly appointed from government offices after getting a

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PICTURE DRAWN ON ELECTRONIC TYPEWRITER  
 Fig. (11)

diploma in shorthand examination. They are selected merely on the basis of paper qualifications. As a result, the knowledge required by the candidates becomes rigid and vain. The candidates obtain the skill of copying down in typing only but loose educational approach as well as communication skills through such examinations. Mr. Misal gave an example that for typing a balance-sheet, specimen is given. In such a specimen, the amount of 'authorised capital' is not underlined. Such practices mislead the typist as well as the reader. Many such discrepancies are found in the paper-setting, which give wrong impression about the technical formalities of typewriting.

For having an idea about the mechanism and functioning of a typewriter, ten marks should be allotted. These should be credited by conducting tutorials just like high-school method. Thus, there should be internal credit of ten marks for the examination. It will prove useful for the candidates.

The interview concluded with the positive suggestion that these examinations should be conducted by the University, which would result in the introduction of educational approach to it together with theoretical background and also will lead to increase in the value of typewriting examinations.

## 2.6 Future of the Art of Typewriting:

Electrical and electronic typewriters are now universally accepted. Typewriters are available for almost every language, including Arabic and Hebrew. Models are available that

type special characters such as musical notes, foreign language accents and pharmaceutical symbols. There are braille typewriters for the blind. Some modern typewriters have specially treated ribbons that remove the errors. One kind of ribbon actually lifts wrong letters off the paper. The other kind covers a mistake in white. Both allow for rapid correction of typing errors.

After considering the above mentioned improvements in typewriting machines, we have an idea about the future of the art of typewriting. Now a days, the technique of 'stenography' has gained much importance in administrative vis-a-vis business field. Typewriting is a complementary job for stenography. For getting jobs in business enterprises and other administrative offices, it requires many times the technique of stenography and typewriting. If a candidate obtained the skill of typewriting and shorthand, he has more chances for getting a job than the other candidates. The art is also useful for self employment. One can establish typewriting institute or do various job work by purchasing or hiring a typewriter. There are many examples of self-employing people installing typewriting stall in front of District of High Courts. Thus, importance of the art of typewriting is increasing as a device for self-employment, forming skill in available labourforce and eradicating unemployment problem. The basic process in computers and data processing machine is made up of typewriting skill. The changes made by computers in the field of printing are quite noteworthy. Due to the introduction of photocopying machines, typewriters, carbon papers and cyclostyling machines are vanishing day-by-day. Therefore, the examination

board framing a syllabus for 'secretary' will be complementary to typewriting profession. For such project, the proprietors of typewriting institutes have to develop educational qualifications. The intention behind establishing such institutes should not be only to learn typewriting and shorthand but to provide knowledge regarding 'secretary' in a comprehensive sense.

Another technical aspect of the art of typewriting is the need for improvement in Marathi keyboard. Existing Marathi typewriters which have been incomplete in respect of the keyboard. It does not contain the signs like !, ?, %, +, ÷, ;, etc. The typists have to spend much time and efforts for typing such signs. The older keyboards are much better than the latter. For completing Marathi typewriters, the key board should be improved.

At last, but not the least, that the aim of typewriting institutees should be to impart knowledge regarding 'secretary' in the comprehensive snese and not to teach only the typewriting and shorthand.

\* \* \*

Fig. 12.

