

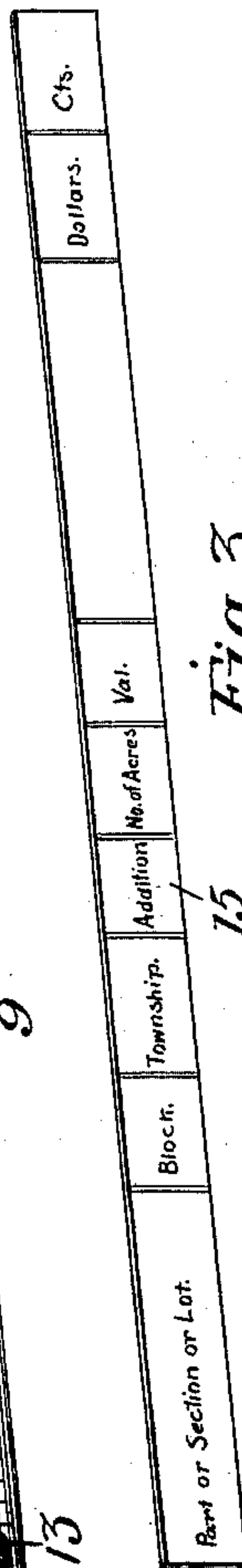
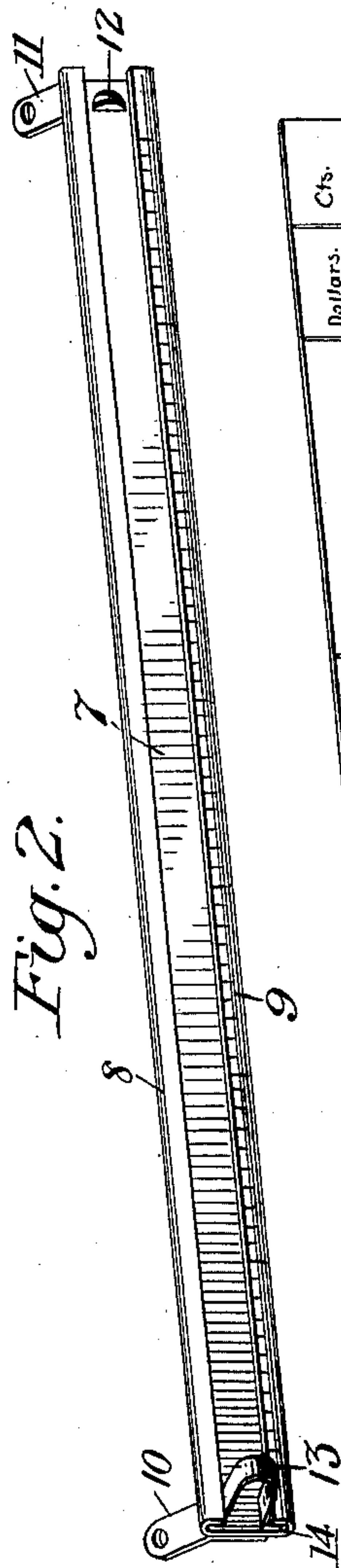
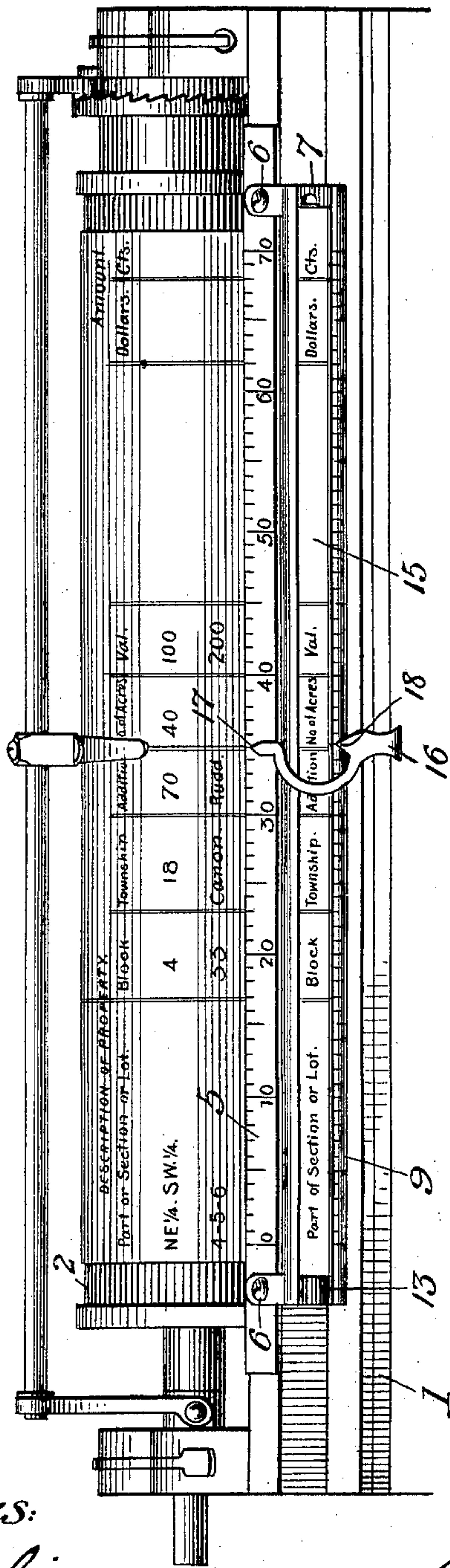
No. 692,370.

Patented Feb. 4, 1902.

C. D. SHAEFFER.
TYPE WRITING MACHINE.

(Application filed Apr. 22, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

CHARLES DENHAM SHAEFFER, OF CANON CITY, COLORADO.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 692,370, dated February 4, 1902.

Application filed April 22, 1901. Serial No. 56,895. (No model.)

To all whom it may concern:

Be it known that I, CHARLES DENHAM SHAEFFER, a citizen of the United States, residing at Canon City, county of Fremont, State of Colorado, have invented certain new and useful Improvements in Type-Writing Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to type-writing machines, and more particularly to the scales thereof; and the object of my invention is to provide a scale-carrying frame that is capable of application to any of the ordinary forms of type-writing machines and that is adapted to receive removable scale or index strips that are variously marked or graduated to correspond with the particular kind or class of work to be done.

In carrying out my invention I employ a frame that is secured to the machine in juxtaposition to the main scale, which frame is constructed to receive and retain a strip or piece of paper, cardboard, or other suitable material which is graduated or marked in any desired manner. Coöperating with this scale is a pointer attached to the frame of the machine in the usual way to indicate the progress and position of the carriage. For use in tabular or column work or for filling in printed blanks the strip is marked to properly indicate the tabular markings, columns, or blank spaces to be filled in and may as a matter of convenience consist of a duplicate of the head of the sheet to be printed, showing the particular arrangement of tables or columns or blanks to be filled in with respect to the main machine-scale and a corresponding scale marked or inscribed on the frame.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a conventional paper-carriage of a type-writing machine embodying my invention. Fig. 2 is a perspective view of the scale-carrying frame. Fig. 3 is a corresponding view of a removable index-strip to be applied to said frame.

Referring to Fig. 1 of the drawings, 1 represents the paper-carriage of a type-writer machine provided with a rotatable cylindrical

platen 2. The main scale 5 is secured to the carriage 1 by screws 6 or equivalent fastening means to occupy a position parallel with and in operative relation to the platen 2. These features of construction are representative of the common form of type-writer machines and will be found in any of the well-known commercial machines.

Secured in juxtaposition to the main scale 5, preferably by the same screws 6 which secure said scale to the carriage, is a frame 7, composed of a piece of metal or equivalent material having its two opposite edges bent over toward each other to form flanges 8 and 9. Projecting from the rear side of the frame 7 are two perforated lugs 10 and 11, by means of which said frame is secured in position. A detent 12, formed by striking a section of the metal from the frame 7 at right angles to the bottom thereof, coöperates with a U-shaped spring-clip 13 at the opposite end of the frame, which is held in position in the latter by an angularly-disposed lug 14, taking under the flange 9.

Secured in position between the lug 12 and the spring-clip 13 is the index-strip 15, composed of a strip of paper or other suitable material, which occupies the frame and is held rigidly in position against lateral movement by the flanges 8 and 9. This index-strip is adapted to be quickly removed and replaced by another as the exigencies of the work may demand, and it is my intention to rule or mark said index-strips with appropriate designations to correspond with the particular work to be done—that is to say, when tabular or column work is being done the strip is marked in a way to correspond with the caption-heads of the tables or columns which are to be followed in working up the complete sheet, as clearly indicated in Figs. 1 and 3. One of the flanges, preferably the lower flange 9, is provided with a scale graduated to correspond with the main scale 5, so that when the frame 7 is in place the two scales will be in exact parallel alinement with each other.

Coöperating with the main scale 5 and the auxiliary scale carried by the frame 7 is a pointer 16, which is fixed in position to some stationary part of the machine, as is common in the commercial forms of type-writing ma-

chines. I prefer to form this pointer with two index-points 17 and 18 in alinement with each and connected by a suitable offset to permit a sight of the index-strip between them.

5 In the application of my invention to any of the commercial forms of the type-writer machines I apply the frame 7 in proper relation to the main scale, as 5, in the manner indicated above. I then provide an index-
10 strip marked to correspond with the particular work to be performed and insert the same in the frame 7 so that said strip is held between the flanges 8 and 9, the detent 12, and the spring-clip 13. Where such op-
15 eration is feasible, I find it advantageous to cut the strips for this purpose from the head of a sheet of the paper which is to receive the tabular or column work to include the caption of the tables or columns. A sheet
20 of paper of the kind desired is then secured to the platen in the ordinary way, with the rulings, columns or blank spaces in alinement with the corresponding parts of the index-strip 15. As the type-writer machine is
25 operated the upper pointer 17 indicates on the main scale the exact point at which the respective types engage the platen, while the lower pointer 18 coöperates with the scale on the frame 7 and the index-strip and shows
30 at a glance the relative position of the respective columns and the printing position of the types.

My invention is exceptionally simple in application, as it may be applied to a type-writer
35 in use without disturbing the relation of any of the parts. It is particularly useful in that the index-strip may be removed and a new one applied to correspond with the work to be done, and as it coöperates with the main scale,
40 which is not removed from the machine, the exact registry and the proper correspondence of the work with the main scale and the index-strip is always assured.

Having thus described my invention, what
45 I claim is—

1. In a type-writing machine, having a main scale, an auxiliary scale, comprising a frame and an index-strip adapted to be freely removed from said frame, and lugs on said frame adapted to be engaged by the securing means 50 of the main scale.

2. In a type-writing machine, having a main scale, an auxiliary scale, comprising a frame and an index-strip adapted to be freely removed from said frame, lugs on said frame 55 adapted to be engaged by the securing means of the main scale, and a pointer coöperating with said scales.

3. An auxiliary scale for a type-writer, comprising a frame formed of a plate having its 60 opposite edges bent over toward each other, an index-strip held in said frame under the edges thereof and freely removable therefrom, lugs on said frame to secure the same in juxtaposition to the main scale, in combination 65 with a duplex pointer coöperating with said main and auxiliary scales.

4. An auxiliary scale for a type-writer, comprising a frame formed of a plate having its 70 opposite edges bent over toward each other, a scale on one edge thereof graduated to correspond with the main scale, an index-strip held in said frame and freely removable therefrom, lugs on said frame to secure the same 75 in juxtaposition to the main scale, in combination with a duplex pointer coöperating with said main and auxiliary scales.

5. An auxiliary scale for a type-writer, comprising a frame having its opposite edges bent 80 over toward each other, a removable index-strip in said frame, a lug at one end of said frame, and a spring-clip engaging the other end of said frame, whereby said index-strip is held in position in said frame.

In testimony whereof I affix my signature 85 in presence of two witnesses.

CHARLES DENHAM SHAEFFER.

Witnesses.

GEORGE R. CASSEDY,

JACOB MCKENDREE HANKS.