

No. 753,318.

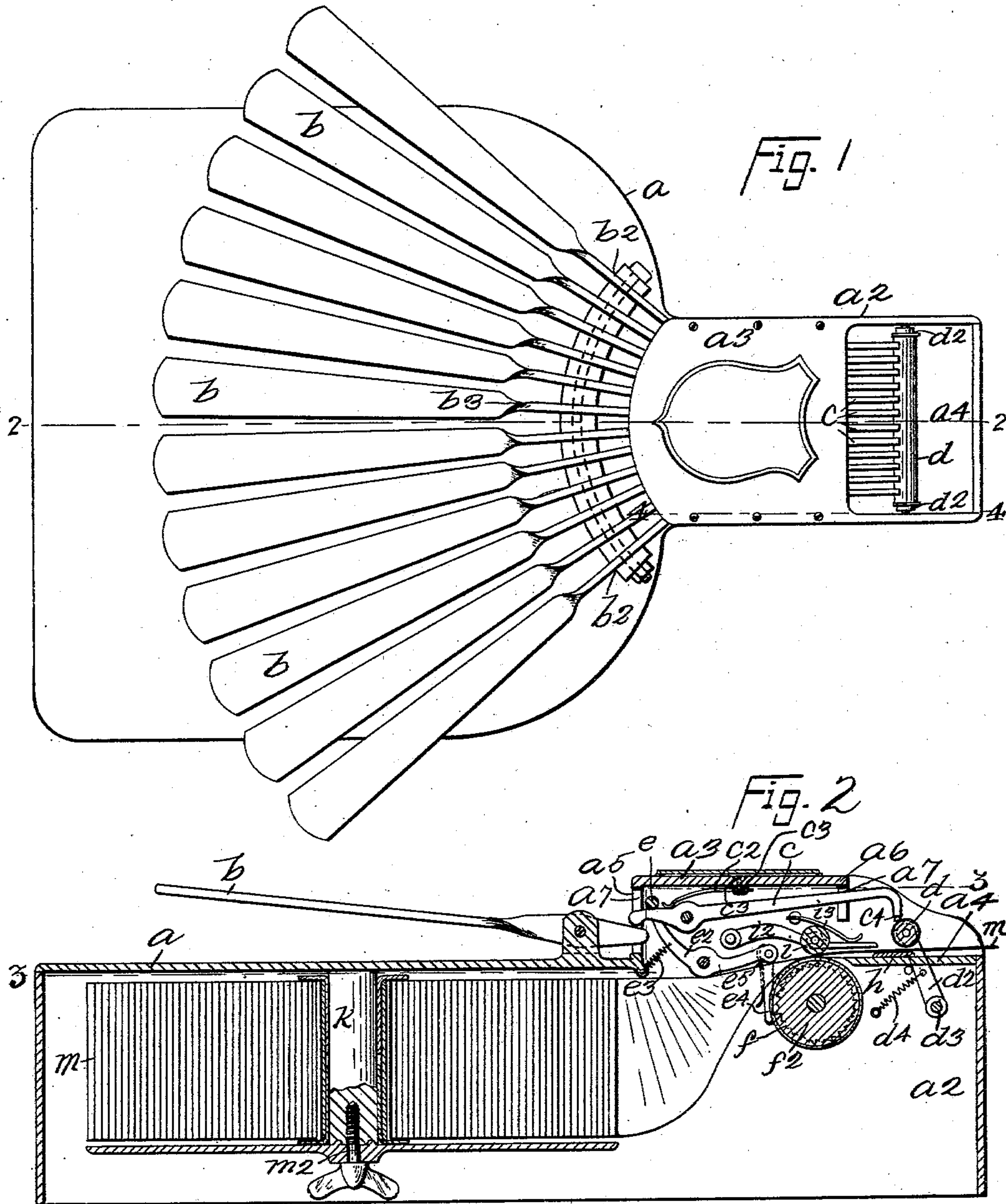
PATENTED MAR. 1, 1904.

A. B. SALIGER.
STENOGRAPHIC TYPE WRITING MACHINE.

APPLICATION FILED JUNE 8, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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Fig. 3

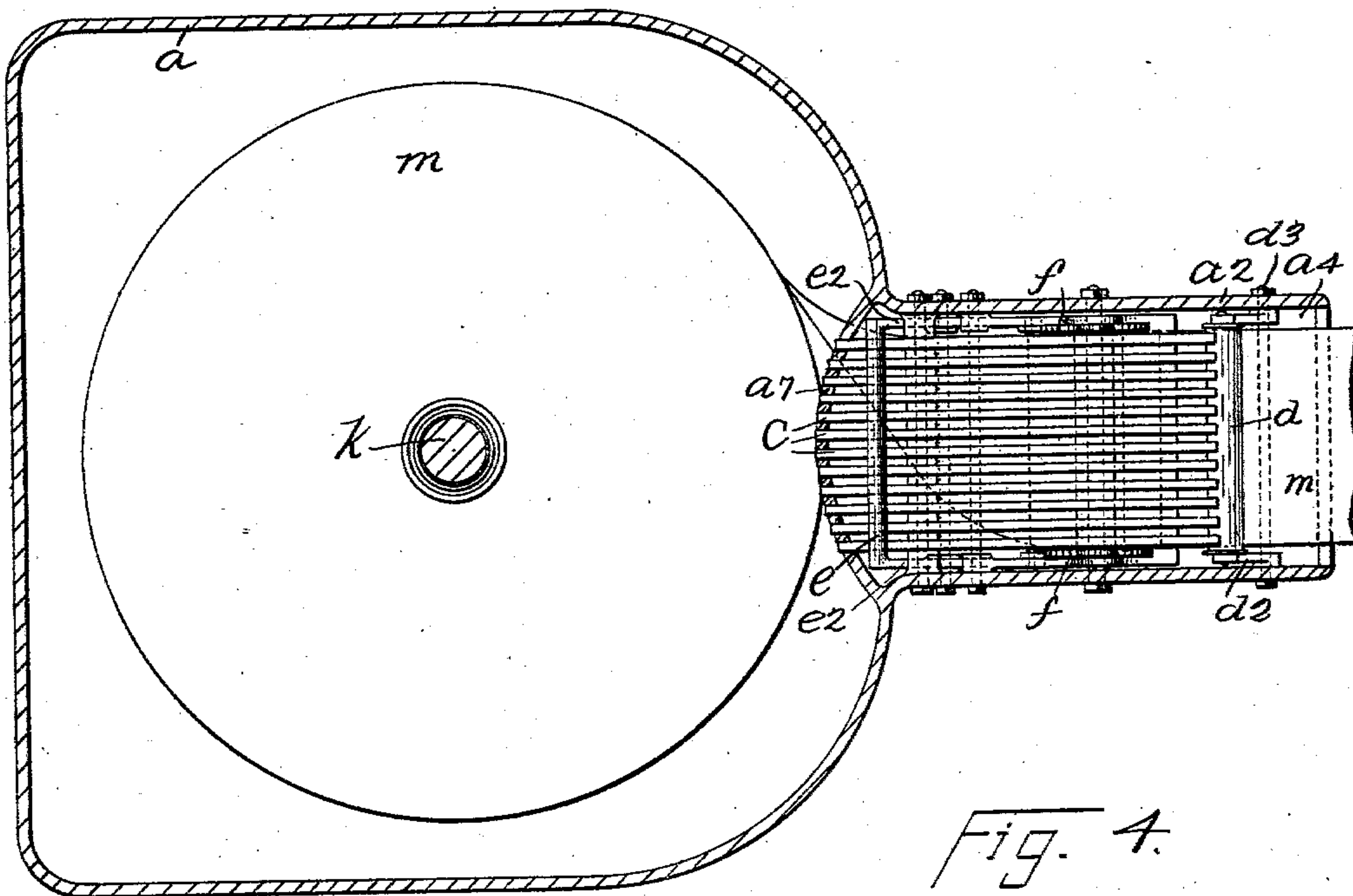
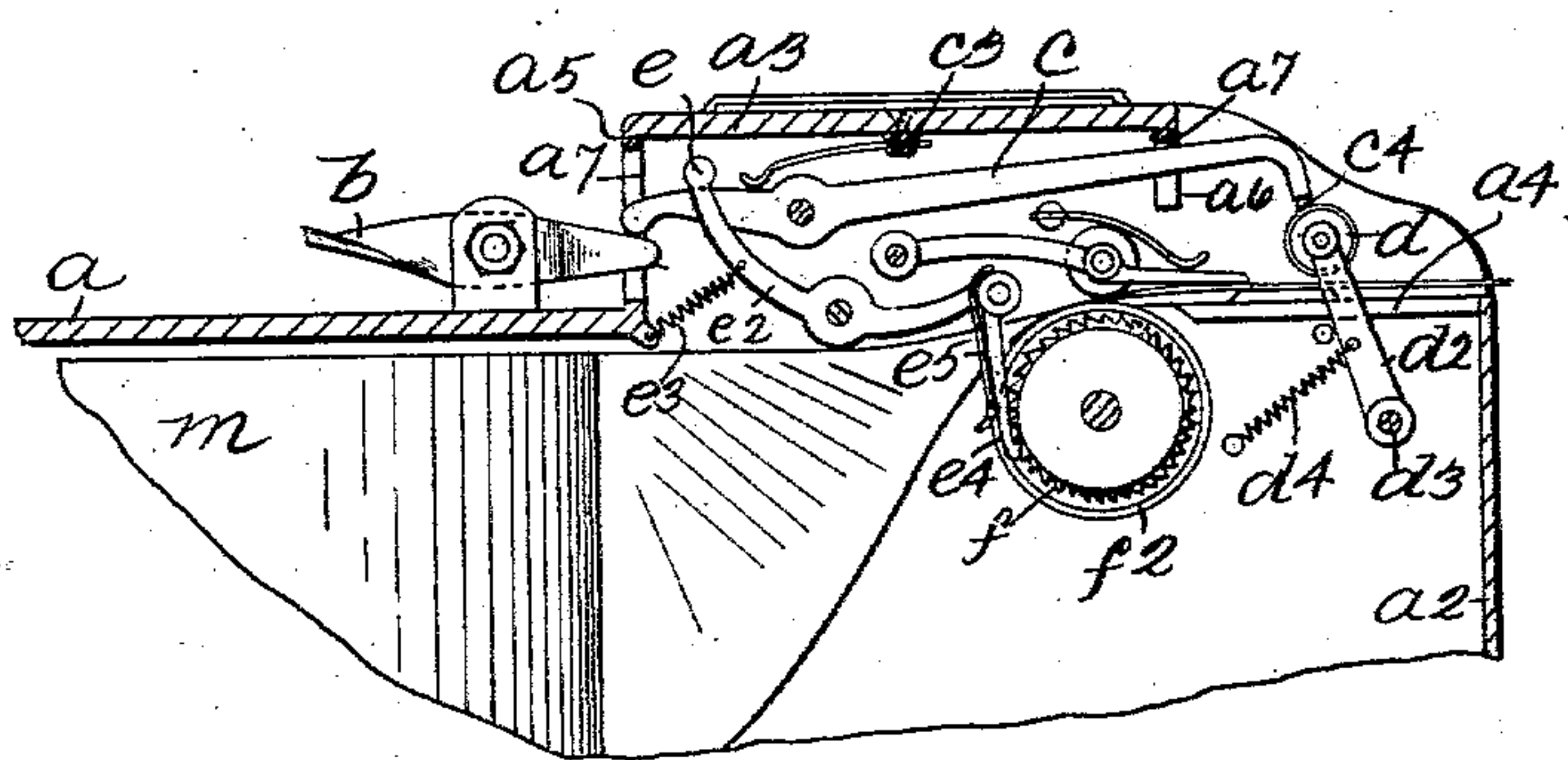


Fig. 4.



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ALOIS B. SALIGER, OF NEW YORK, N. Y., ASSIGNOR TO INTERNATIONAL BUSINESS EXCHANGE, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

STENOGRAPHIC TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 753,318, dated March 1, 1904.

Application filed June 8, 1903. Serial No. 160,472. (No model.)

To all whom it may concern:

Be it known that I, ALOIS B. SALIGER, a citizen of the United States of America, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Stenographic Type-Writing Machines, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved stenographic type-writer for use in taking business or other dictation and permanently imprinting the same upon paper or other suitable material in such a manner as to be readily understood and translated by the operator of said type-writer, a further object being to provide a type-writer of this class which is simple in construction and operation, comparatively inexpensive, and which may also be adapted for the use of blind persons in transferring their thoughts to paper or in reading the same therefrom.

My invention is fully described in the following specification, of which the accompanying drawings form a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a plan view of a type-writer of this class constructed according to my invention; Fig. 2, a longitudinal section thereof on the line 2 2 of Fig. 1; Fig. 3, a sectional plan view thereof on the line 3 3 of Fig. 2; and Fig. 4, a detail view of a part of the construction, taken on the line 4 4 of Fig. 1.

In the drawings forming part of this specification I have shown a casing a , provided with a neck member a^2 at one end thereof, said neck member being provided with a detachable plate or cover a^3 and with a plate a^4 at the extreme end thereof and which is on a different horizontal plane than the plate a^3 , and the casing a and neck portion a^2 are preferably open at the bottom, while the front and rear walls of that portion of the neck member a^2 which is above the body portion

of the casing a and indicated at a^5 and a^6 are provided with a plurality of vertical slots a^7 , the reason for which will be hereinafter explained.

Pivotally mounted on the top of the body portion of the casing a are a plurality of key-levers b , preferably arranged in a semicircle, as shown at b^2 , the key-levers b being preferably formed of a narrow piece of sheet metal and bent at right angles, as shown at b^3 , and the short inner ends of the key-levers b pass through the corresponding one of the slots a^7 , which acts as a guide therefor, and the segmental arrangement of the fulcrums of the key-levers b is to reduce the space required for the operative inner ends thereof, at the same time allowing greater range for the outer ends upon which the fingers of the operator rest.

Pivotally mounted in the neck portion a^2 are a plurality of type-bars c , the inner ends of which pass into a corresponding one of the slots a^7 in the front wall a^5 and engage each with a corresponding one of the key levers or bars b , while the outer ends of the type-bars c pass through the rear wall a^6 of the neck portion a^2 and are engaged each by a corresponding slot a^7 in the wall a^6 , these slots preventing irregular movement of the type-bars c , and each of the type-bars c is provided with a spring c^2 , which serves to depress the inner ends thereof, and the other ends of the springs c^2 are held in a transverse plate c^3 , secured to the sides of the neck portion a^2 , and are held therein by means of set-screws c^3 , and the springs c^2 by holding the inner ends of the type-bars down also serve to hold the inner or free ends of the key-bars in their uppermost position.

On the lower side of the end of each of the type-bars c is a type c^4 , and below all of which is an ink-roll d , carried by supports d^2 , which are pivoted at d^3 , and the type c^4 in descending strike the ink-roll d slightly off the center, and thereby force the same out of the way; but by means of the spring d^4 the ink-roll assumes its normal position as soon as all the

type are in their normal position, and by means of this construction the type are freshly inked at each downward movement thereof.

Resting upon the inner ends of the type-bars c is a transverse bar e , to each end of which is secured an arm e^2 , which are pivoted to the sides of the neck portion a^2 and with each of which is connected a spring e^3 , the other ends of which are secured to the body portion a and which serve to keep the transverse bar e in position upon the type-bars c .

Pivotally hung upon the end of each of the pivoted arms e^2 is a pawl e^4 , held in its operative position by means of a spring e^5 , and the pawls e^4 engage the teeth of a ratchet-wheel f , secured to each end of a transversely-arranged roller f^2 , which is rotatably mounted below and in front of the operative plate h for the type c^4 , said plate serving as the platen of the machine, and, as will be seen, when the transverse bar e is elevated the pawls e^4 descend, and when the bar e is again drawn into its normal position by the springs e^3 the pawls e^4 engage the ratchet-wheels f and revolve the roller f^2 a predetermined distance.

Mounted directly above the roller f^2 is a friction-roller i , carried by pivoted supports i^2 , which are operated by springs i^3 , and the friction-roller i bears upon the roller f^2 , as will be seen in the drawings.

The body portion of the casing a is preferably open, and secured to the closed top thereof is a downwardly-directed post k , upon which is loosely mounted a roll of paper ribbon m , which is held on said post by means of a washer and screw m^2 or in any other desired manner, and the free end of the paper ribbon m passes between the roller f^2 and the friction-roller i , over the platen h , beneath the ink-roll d , and out of the neck portion a^2 , and when the key-bars b are operated, either singly or in sets, the type c^4 strike the paper ribbon after having been inked, and the desired character or groups of characters are stamped upon the paper ribbon; and at the same time the pawls e^4 are lowered, and when the type-bars resume their normal positions the roller f^2 is turned and the paper ribbon m is forced a predetermined distance, which operation produces the spacing between lines of writing. It will be seen that the paper ribbon is twisted from a vertical to a horizontal position as it is being moved in the manner just described, the reason for which is that a larger roll of said paper can be placed horizontally in the body portion of the casing a than if the same were arranged vertically.

It will be evident that any arrangement of the characters employed to produce the desired result may be made, and the system for writing has no bearing on applicant's construction, and, if desired, the ink-roll may be dispensed with and dies of various kinds substituted for the type, thereby producing matter

which would be capable of being read by the blind, and other changes in and modifications of the construction herein shown and described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A stenographic type-writing machine, comprising a casing, a neck portion connected therewith and higher than the body portion of said casing, a roll of paper ribbon mounted in said body portion, a plurality of key-bars pivoted on said body portion and extending into said neck portion, a plurality of type-bars pivoted in said neck portion, each of which is in operative connection with one of said key-bars, a type on each of said type-bars, devices for automatically inking said type and means for moving said paper ribbon a predetermined distance at each operation of one or more of said key-bars, substantially as shown and described.

2. A stenographic type-writer, comprising a casing, a reduced neck portion thereon and higher than the body portion of said casing, a plurality of key-bars pivoted in a segment on said body portion, a roll of paper ribbon in said body portion and one end of which passes through said neck portion, a plurality of type-bars pivoted in said neck portion and each of which is in operative connection with one of said key-bars, a spring in operative connection with each of said type-bars, a type on each of said type-bars arranged over the outer end of said paper ribbon, an ink-roll pivotally mounted between said type and said paper ribbon and means for moving said paper ribbon, substantially as shown and described.

3. A stenographic type-writing machine, comprising a casing, a reduced neck portion thereon and higher than the body portion of said casing, a plurality of key-bars pivoted in a segment on said body portion and extending into said neck portion, a roll of paper ribbon in said body portion and the outer end of which passes through said neck portion, a plurality of type-bars pivoted in said neck portion and each of which is in operative connection with one of said key-bars, a spring in operative connection with each of said type-bars, a type on each of said type-bars arranged over the free end of said paper ribbon, an ink-roll pivotally mounted between said type and said paper ribbon, a transverse bar resting on the inner ends of said type-bars, a dependent arm at each end of said transverse bar and pivoted in said neck portion, a spring in operative connection with each of said pivoted arms, a pawl pivoted to the outer end of each of said pivoted arms, a transverse roller mounted in said neck portion beneath said paper ribbon, a ratchet-wheel on each end of said roller and

in operative connection with the correspond-
ing one of said pawls, said pawls being adapt-
ed to revolve said roller a predetermined dis-
tance at each downward movement of said
5 transverse bar and means for maintaining fric-
tion between said paper ribbon and said roller,
substantially as shown and described.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of the subscribing witnesses, this 3d day 10
of June, 1903.

ALOIS B. SALIGER.

Witnesses:

J. CHRIS. LARSEN,
GEORGE L. BLUMERS.