

No. 842,797.

PATENTED JAN. 29, 1907.

C. J. MOHNS.

TABULATING DEVICE FOR TYPE WRITING MACHINES.

APPLICATION FILED AUG. 27, 1904.

2 SHEETS—SHEET 1.

Fig. 1. A-B

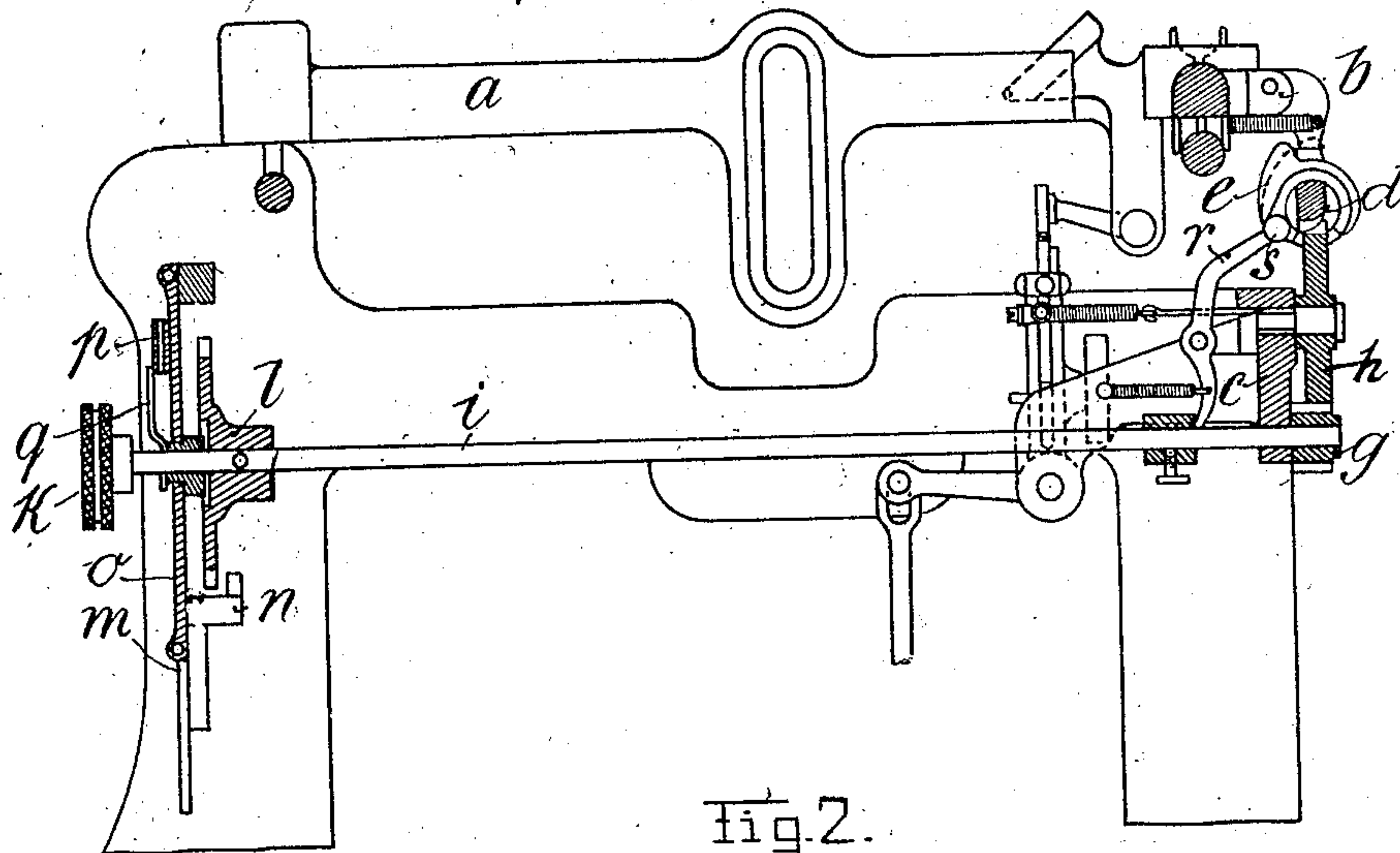
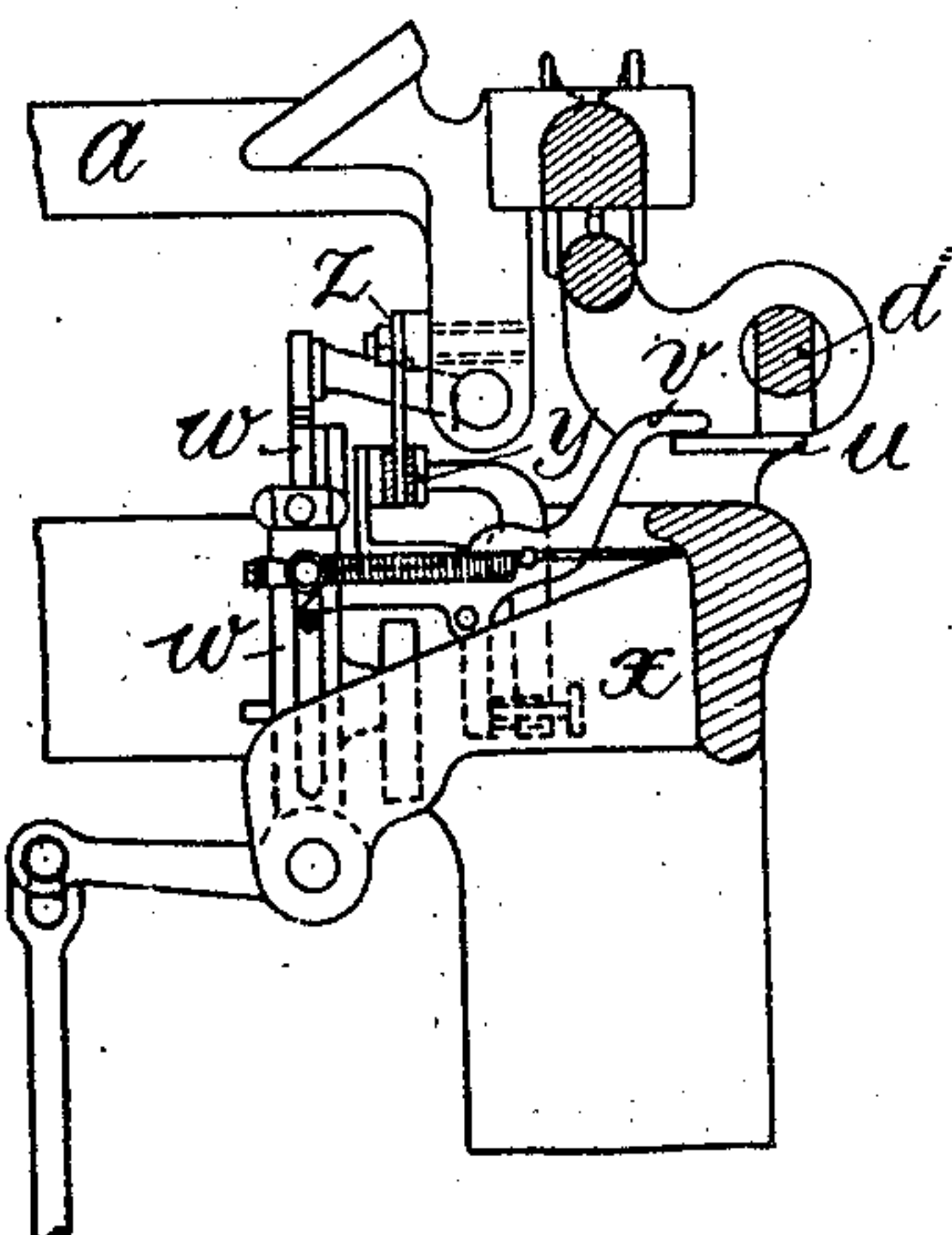


Fig. 2.

C-D



Witnesses

J. M. Kuehne

John A. Prewitt

Inventor  
Carl Julius Mohns

BY *Richardson*

ATTORNEYS

No. 842,797.

PATENTED JAN. 29, 1907.

C. J. MOHNS.

TABULATING DEVICE FOR TYPE WRITING MACHINES.

APPLICATION FILED AUG. 27, 1904.

2 SHEETS—SHEET 2.

Fig. 3.

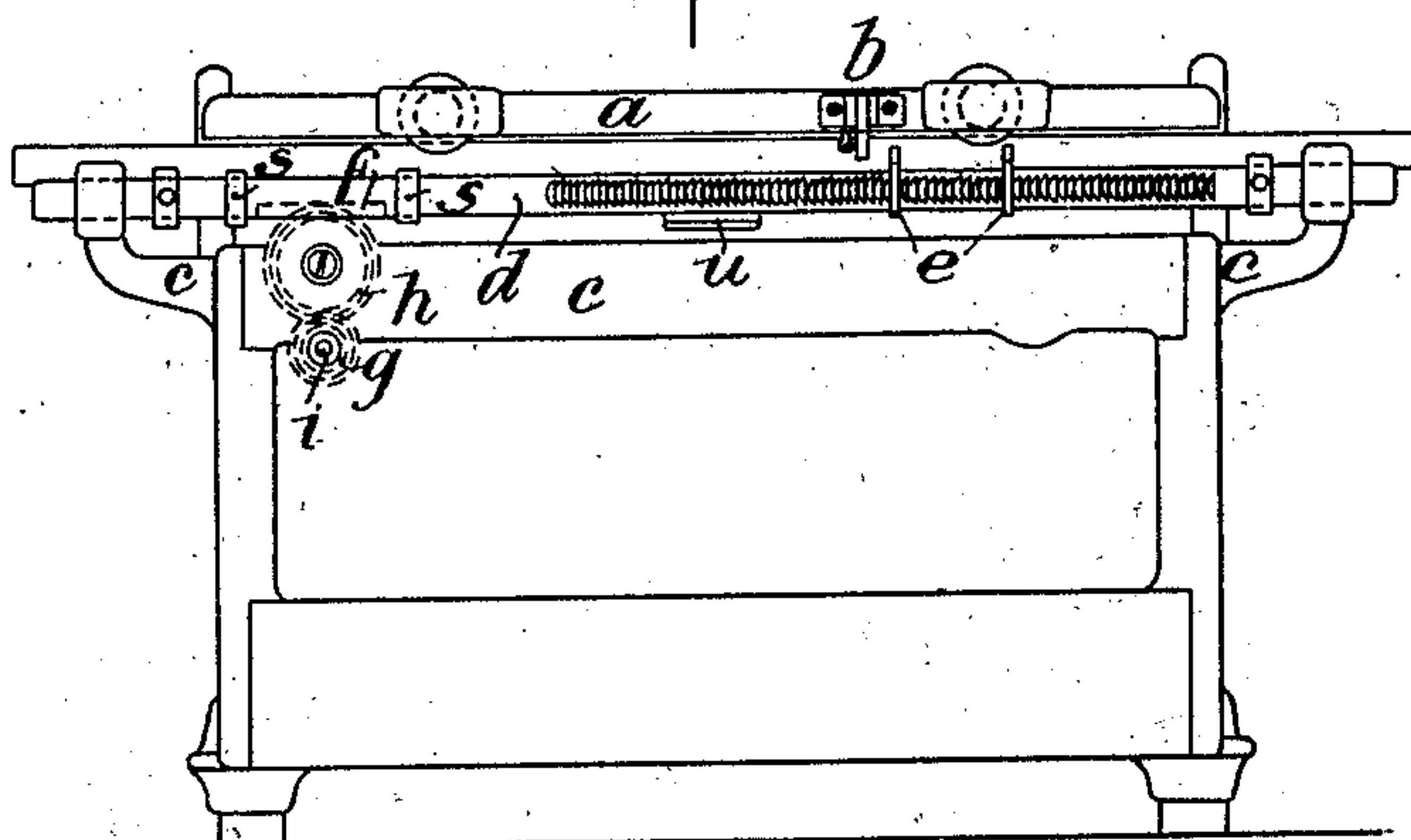
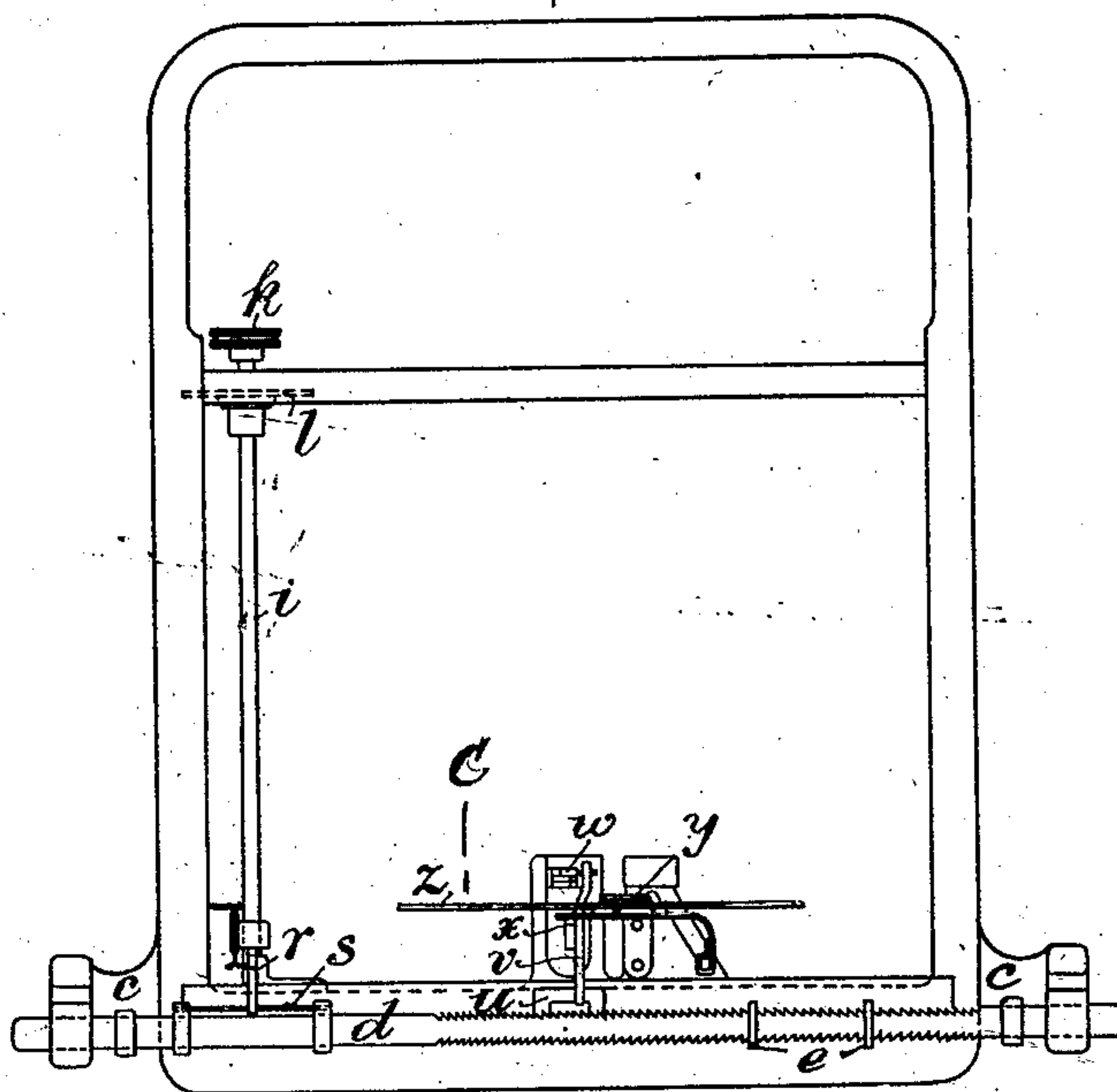



Fig. 4.



Witnesses  
N. M. Kuchue  
A. H. White

Inventor  
Carl Julius Mohrns

By  ATTORNEYS



# UNITED STATES PATENT OFFICE.

CARL JULIUS MOHNS, OF CHEMNITZ, GERMANY, ASSIGNOR TO THE FIRM OF  
WANDERER FAHRRADWERKE, VORM. WINKLHOFFER & JAENICKE, A. G.,  
OF SCHÖNAU, SAXONY, GERMANY.

## TABULATING DEVICE FOR TYPE-WRITING MACHINES.

No. 842,797.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed August 27, 1904. Serial No. 222,466.

*To all whom it may concern:*

Be it known that I, CARL JULIUS MOHNS, of Chemnitz, Germany, have invented certain new and useful Improvements in and  
5 Relating to Tabulating Devices for Type-Writing Machines, of which the following is a specification.

My invention relates to tabulating mechanism for type-writing machines.

10 The object of the present invention is a device for moving the stop-bar in the tabulating mechanism of type-writing machines.

In the tabulating mechanisms which were used heretofore the movement of the stop-bar  
15 is effected by means of a lever capable of performing two different motions, so as to turn, on the one hand, the stop-bar around its longitudinal axis in order to release or to arrest the paper-carriage, and to shift, on  
20 the other hand, said stop-bar in the direction of its longitudinal axis in order to adjust the apparatus according to a scale. Devices of this kind require comparatively much space, the lever being turned on its fulcrum in two  
25 different directions. Therefore it is difficult to fit up said device in the machine and its manipulation requires comparatively much time and work.

The purpose of the present invention is to  
30 overcome said disadvantages. This purpose is accomplished in such a manner that well-known lever for moving the stop-bar is replaced by a shaft which when shifted in its direction of length causes the stop-bar to be  
35 turned around by lever action, and which when slightly rotated around its longitudinal axis causes the stop-bar to be shifted by means of toothed gear.

40 The drawings represent a form of execution of this invention.

In said drawings, Figure 1 is a longitudinal section. Fig. 2 is a longitudinal section along C'D of Fig. 4. Fig. 3 is a rear view. Fig. 4 is a view from above with the paper-carriage removed.  
45

50 Paper-carriage *a* carries on the rear side a stop *b*, which is either fixed or adapted to swing. On the rear side of machine-frame *c* is fitted up a stop-bar *d*, constructed so that it is capable of receiving in its saw-shaped notches any desired number of stops *e*. This bar is also shaped for a short distance *f* in the form of a rack, (see Fig. 3,) and the toothed wheel *g* acts upon said rack through the intermediate wheel *h*. (See Fig. 1.) Toothed wheel *g* is secured on sliding shaft *i*, to which rotary and sliding motion is given by stud *k*. The angle at which shaft *i* turns each time is maintained by an arresting-disk *l*, with spring *m*, and it is indicated by a scale *p* with index *q*. (See Fig. 1.) When shaft *i* is shifted, the parts are maintained in the adjusted position by means of block *n*, fastened to the front side of the machine. The shifting motion of shaft *i* is communicated to revolve stop-bar *d* through rigid tappet *s* by means of lever *r*, moved by a collar on the shaft.  
55  
60  
65  
70  
75  
80  
85  
90  
95  
100  
105



were just in motion return again into their position of rest. In this manner spaces are produced for a regular written matter. In order to obtain wider spaces, the button is pushed again, allowing thus the carriage to run as far as to the next stop. If tabular work has to be furnished instead of regular written matter, then the stroke of the type will write a number consisting of but one cipher if the index and the carriage are placed in the above-described position. If the next number thereunder has to consist of four ciphers, the button should at first be turned until the index points on the scale to "thousand." The stop-bar, with the stops, is thus moved by the width of three characters in a direction being opposed to that in which the carriage runs. If the button is now pushed, the free motion of the carriage is checked sooner, the difference amounting to the width of three ordinary character-spaces, and the operator is thus enabled to write a number consisting of four ciphers correctly under the preceding digit.

When the carriage-stop strikes against the stops of the stop-bar, a certain shock is exerted on the machine. This shock may be reduced to a minimum by means of pushing the button more or less through and applying thus the brake with increased or diminished force.

The aforesaid facts show that if the button is pushed but once the carriage runs from one column to the next one. If certain columns have to remain free, the button should be pushed as many times as there are columns which have to remain free—that is to say, which contain no type-written characters.

What I claim is—

1. In a tabulating mechanism for type-writing machines the combination with the paper-carriage, stops secured thereto, stop-bar mounted near said paper-carriage, said stop-bar having both a longitudinal and a rotary movement, and stops on said bar adapted to engage the stops on said paper-carriage, of a shaft and separate means carried thereby for imparting either a longitudinal or a rotary movement to said stop-bar, substantially as described.

2. In a tabulating mechanism for type-writing machines the combination with the

paper-carriage, stops secured thereto, a stop-bar mounted near said paper-carriage, said stop-bar having both a longitudinal and a rotary movement, and stops on said bar adapted to engage the stops on said paper-carriage, of a shaft, means thereon for imparting a longitudinal movement to the stop-bar, a lever operated by said shaft, and means carried by said lever for imparting a rotary movement to said stop-bar, substantially as described.

3. In a tabulating mechanism for type-writing machines the combination with the paper-carriage, stops secured thereto, a stop-bar mounted near said paper-carriage, said stop-bar having both a longitudinal and a rotary movement and stops on said bar adapted to engage the stops on said paper-carriage, of a shaft, a lever operated thereby and adapted to impart a rotary movement to said stop-bar and a pinion on said shaft adapted to impart a longitudinal movement to said stop-bar, substantially as described.

4. In a tabulating mechanism for type-writing machines the combination of the paper-carriage, stops carried thereby, a stop-bar, adjustable stops carried thereby and a rack formed on said stop-bar, of a shaft having both a longitudinal and a rotary movement, a pinion carried by said shaft and engaging said rack, a collar on said shaft, a lever engaging said collar and means carried by said lever for rotating said stop-bar, substantially as described.

5. In a tabulating mechanism for type-writing machines the combination with paper-carriage, the stops carried thereby, the stop-bar, the stops on said bar engaging the stops on said paper-carriage, the shaft having both a rotary and a longitudinal movement and separate means carried thereby for giving said stop-bar a longitudinal and a rotary movement, of the carriage-escapement mechanism, a lever for releasing said escapement mechanism and means carried by said stop-bar for operating said lever, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CARL JULIUS MOHNS.

Witnesses:

FREDERICK J. DIETZMAN,  
ERNST C. MEYER.