No. 630,305. Patented Aug. 1, 1899.

H. C. & F. R. D. SCROGGS & C. F. A. SAXBY.

REGISTERING DEVICE FOR TYPE WRITING MACHINES.

(Application filed May 1, 1899.)

(No Model.)

Fig. 2.

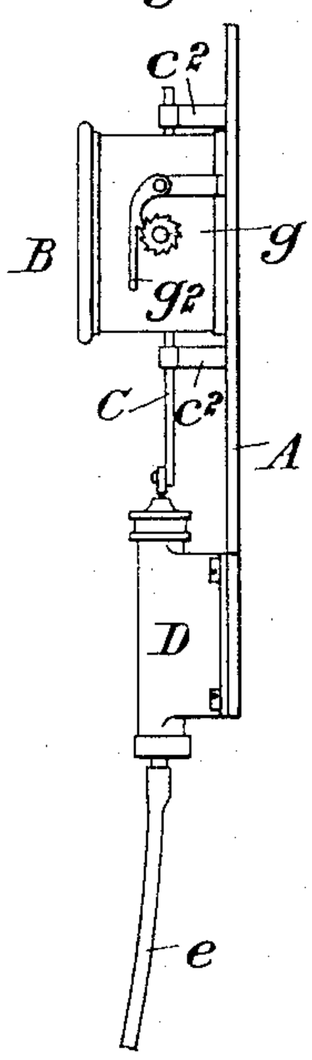


Fig. 1.

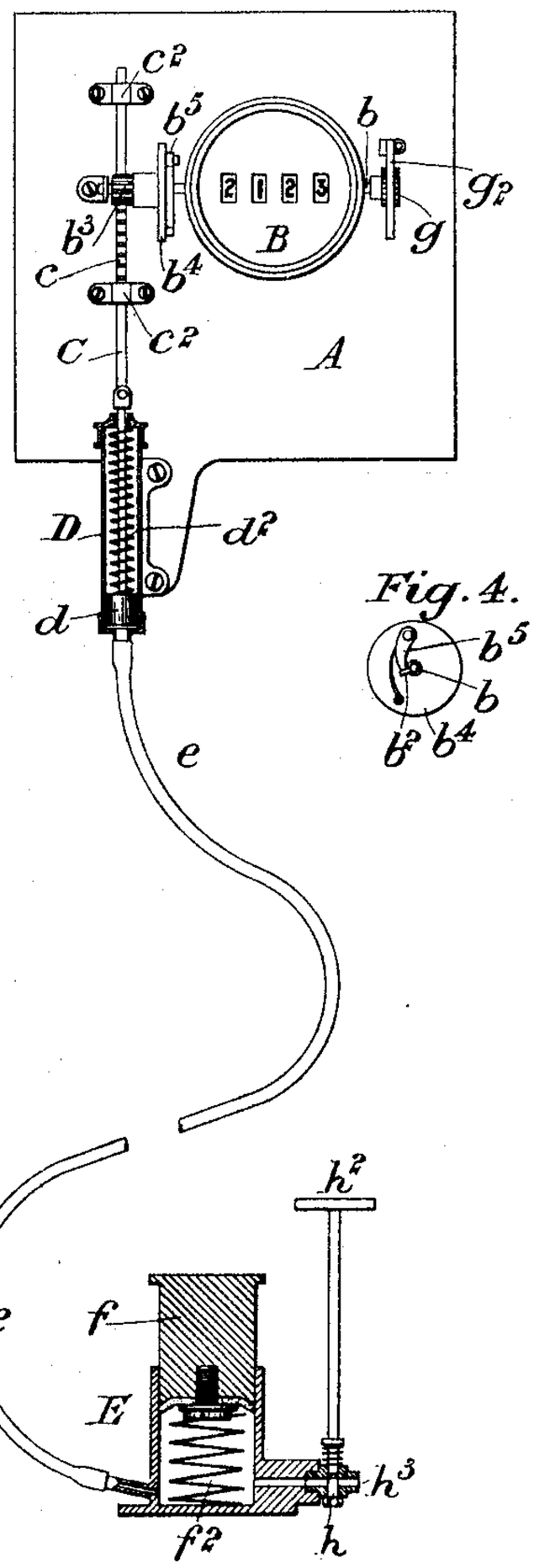


Fig. 3.

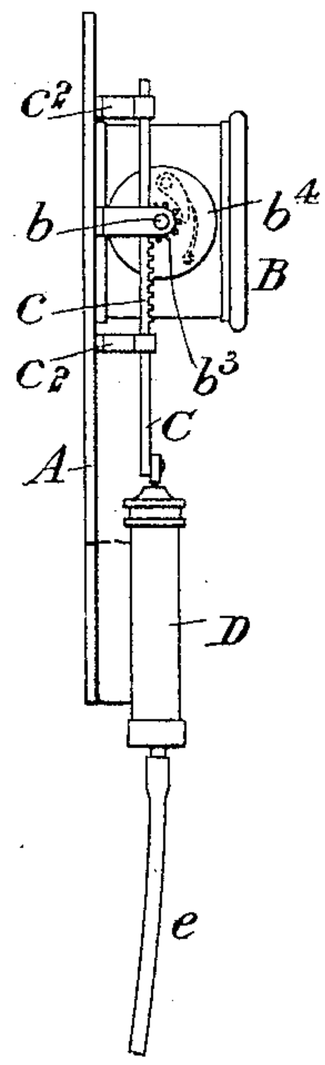
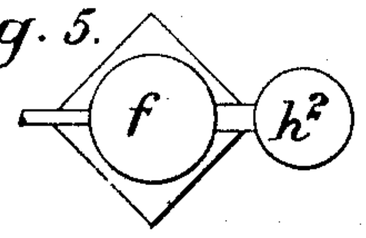


Fig. 4.

Fig. 5.



WITNESSES:
F. W. Wright.
M. A. Miles.

INVENTORS
HAROLD CHARLES SCROGGS
FRANCIS REGINALD DANGE SCROGGS
CHARLES FLETCHER ARGYLL SAXBY
BY Howson & Howson,
THEIR ATTORNEYS.

UNITED STATES PATENT OFFICE.

HAROLD C. SCROGGS, OF ST. ALBANS, AND FRANCIS R. D. SCROGGS AND CHARLES FLETCHER ARGYLL SAXBY, OF LONDON, ENGLAND.

REGISTERING DEVICE FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 630,305, dated August 1, 1899.

Application filed May 1, 1899. Serial No. 715,217. (No model.)

To all whom it may concern:

Be it known that we, HAROLD C. SCROGGS, gentleman, a resident of Vancouver, St. Albans, in the county of Herts, FRANCIS R. D. SCROGGS, gentleman, a resident of 4 Wetherby Mansions, Earls Court, London, and CHARLES FLETCHER ARGYLL SAXBY, gentleman, a resident of 26 Margaretta Terrace, Chelsea, London, England, subjects of the Queen of Great Britain and Ireland, have invented certain new and useful Improvements in Registering Devices for Type-Writing Machines, (for which we have applied for a patent in Great Britain, No. 13,633, dated June 18, 1898,) of which the following is a specification.

The object of this invention is to provide type-writers with means whereby the number of words, separate signs, or the like can be counted and their total number registered, the mechanism according to this invention being simple in construction, efficient in action, and not liable to readily get out of order.

According to this invention the spacing-bar or some part of the machine which moves when spacing is effected is caused to act, as hereinafter described, upon a counting device, so as to register the number of spaces made, and consequently the number of separate words, signs, or the like which have been written in any document. The movement of the spacing-bar or equivalent part of the machine is conveyed to the counting device by pneumatic means, and there may be provided means whereby the counting device is not acted upon when extra spacing is being done—that is, lengths of spacing without words, signs, or the like between.

The accompanying drawings represent an apparatus constructed in accordance with our invention.

Figure 1 is an elevation with parts in section, and Figs. 2 and 3 elevations as seen from opposite side. Fig. 4 is a separate view of the pawl arrangement which drives the shaft of the counter, and Fig. 5 is a plan of the device by which the actuation of the counter is obtained.

On a suitable base A is the counting device B, the actuating-shaft b of which carries a projection b^2, with which engages a spring-pawl b^5 on a disk b^4, mounted loosely on the shaft b and carrying a pinion b^3, with which engages a rack c on a bar C, moving in guides c^2 and connected to the rod of a piston d in a cylinder D. The space in this cylinder at the rear of the piston d is in communication by a flexible or other tube e with another cylinder E, which is placed beneath the spacing-bar or equivalent part of the machine, the said cylinder having in it a piston f, which projects, or a rod or projection from which projects, into the path of the said spacing-bar or equivalent part of the machine, so that when the said bar or the equivalent is operated the said piston f is moved inward, and air is forced from the cylinder E along the tube e and into the cylinder D, and the piston d is moved outward, and the rack c operates the pinion b^3 at each stroke to cause the spring-pawl b^5 to act on the projection b^2 on the shaft b sufficiently to move the counting device to the extent of one unit. The piston f is moved outward by a spring f^2, and the piston d is moved inward by a spring d^2. The return movement does not actuate the shaft b, as the spring-pawl does not then act on the projection b^2. On the shaft b is a ratchet-wheel g, with the teeth of which engages a pawl g^2 to prevent any possibility of back movement of the counting device. When it is desired to space without counting, the valve h can be opened by depressing the finger-piece h^2, connected therewith, to allow the air to escape by the passage h^3 without actuating the piston d.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a registering device for type-writing machines, the combination with a registering mechanism, of a cylinder having a fluid-pressure-operated piston positively connected with the registering mechanism for actuating the said mechanism at each movement of the piston by the fluid-pressure, a fluid-pressure cylinder having a piston adapted to be engaged by the spacing mechanism of the type-writing machine, and a pipe connecting the two cylinders, whereby on each movement of the spacing mechanism of the machine the said latter piston will be moved so as to cause

the fluid confined in the cylinder to actuate the first piston, substantially as described.

2. In a registering device for type-writing machines, the combination with a registering mechanism, of a fluid-pressure cylinder, a piston therein adapted to be moved by the spacing mechanism of the machine, connections between said cylinder and the registering mechanism for actuating the latter through the medium of the fluid-pressure in said cylinder as the piston is moved by the spacing mechanism, and means for releasing said fluid-pressure during said operation of the piston, when desired, in order to prevent the operation of the registering mechanism, substantially as and for the purposes set forth.

3. In a registering device for type-writing machines, the combination with a registering mechanism, of a fluid-pressure cylinder, a piston therein adapted to be moved by the spacing mechanism of the machine, connections between said cylinder and the registering mechanism whereby the latter is actuated as the piston is moved by the spacing mechanism, and an outlet from said cylinder for permitting the escape of fluid therefrom, with a valve in said outlet, whereby the fluid may be permitted to escape from said cylinder for any desired time, during the operation of the spacing mechanism, substantially as and for the purposes set forth.

4. In a registering device for type-writing machines, the combination with a registering mechanism, of a fluid-pressure cylinder, a piston having a rod positively connected to the operating-shaft of the registering mechanism, a second fluid-pressure cylinder, a piston therein adapted to be moved by the spacing mechanism of the machine, a pipe connecting said two cylinders, and a valved outlet in the second cylinder for permitting the escape of fluid-pressure therefrom, during any desired time, substantially as described.

In testimony whereof we have signed this specification in the presence of the subscribing witnesses.

HAROLD C. SCROGGS.
F. R. D. SCROGGS.
CHARLES FLETCHER ARGYLL SAXBY.

Witnesses to the signatures of Harold Charles Scroggs and Francis Reginald Dance Scroggs:

WILLIAM FREDERICK UPTON,
JOHN EDWARD NEWTON.

Witnesses to the signature of Charles Fletcher Argyll Saxby:

JOHN WHEATMAN,
HENRY GORDON CAMPBELL.