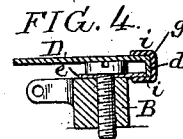
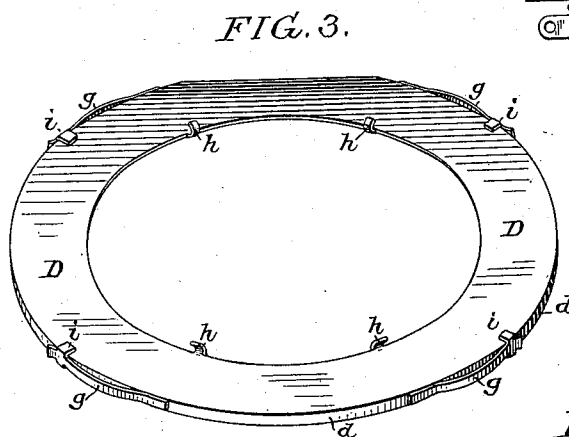
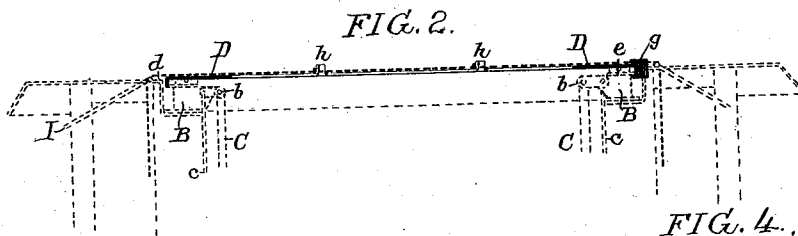
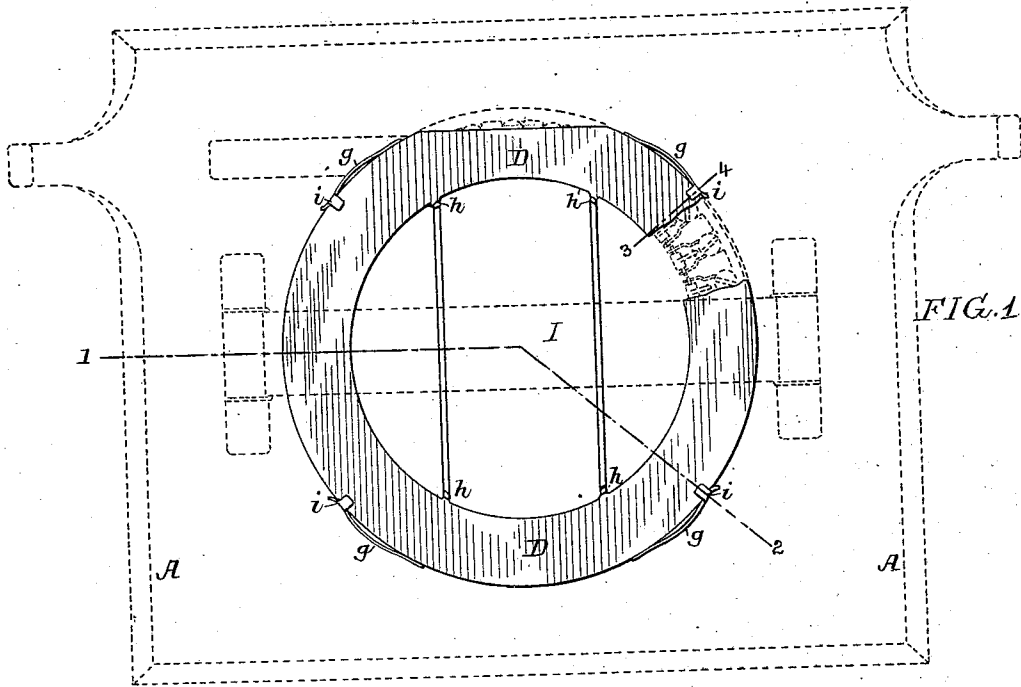


(No Model.)

T. H. STACKHOUSE.
ATTACHMENT FOR TYPE WRITING MACHINES.

No. 471,832.

Patented Mar. 29, 1892.



Witnesses:
Fred H. Goodwin
R. Schleicher.

Inventor:
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by his Attorneys.
Howson & Howson

UNITED STATES PATENT OFFICE.

THOMAS H. STACKHOUSE, OF PHILADELPHIA, PENNSYLVANIA.

ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 471,832, dated March 29, 1892.

Application filed November 16, 1891. Serial No. 412,056. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. STACKHOUSE, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented an Improved Attachment for Type-Writing Machines, of which the following is a specification.

The object of my invention is to provide an attachmant for type-writing machines which will prevent the access of dirt and dust between the pivot-blocks and the clogging of the pivot-points of the type-bars and the connecting-links, as more fully described hereinafter.

In the accompanying drawings, Figure 1 is a plan view of the frame of an ordinary form of type-writing machine in dotted outline, showing my invention applied thereto, a portion of the protecting ring or cover being broken away to show a number of the type-bar pivot-points. Fig. 2 is a sectional view of the same on the line 1 2, Fig. 1. Fig. 3 is a perspective view of the protecting-cover detached from the machine; and Fig. 4 is an enlarged sectional view on the line 3 4, Fig. 1.

In machines of the "Remington" class or other machines in which the pivot-points of the type-bars are exposed the joints become clogged in a short time, owing to the access of dust and dirt, and prevent the accurate and easy operation of the machine.

Referring to the drawings, A represents the frame of a Remington machine; B, the projecting blocks thereon, to which are pivoted at *b* the type-bars C; and *c* represents the links which connect the rear end of the type-bars to the finger-bar below.

D represents the cover-ring, formed of any suitable material—such, for instance, as metal or papier-maché—and is provided with a peripheral flange *d*, extending entirely around the same and adapted to fit over the connecting-bars *e*, which aid in holding the bearing-blocks B in position. This ring is provided at

intervals with spring-catches *g*, secured in any suitable manner to the flange *d* and having at the loose end opposite ears *i i'*, the ear *i* being adapted to rest upon the upper face of the ring D, while the ear *i'* extends beneath the connecting-bar *e*. The ring is thus held in position, and it may, if desired, be permanently secured to the machine, although the detachable form is preferred for convenience in making repairs.

At suitable intervals on the ring D, I provide hooks *h*, attached to or formed integral with the body of the ring, the hooks acting to hold the usual guiding-bands for the ink-ribbon I.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A protecting-ring for type-writing machines, comprising a flanged ring and a series of catches carried by said ring and adapted to hold the same in position, substantially as specified.

2. The combination of the frame of the machine, the type-bars pivoted to said frame, and a cover for said type-bars, comprising a flanged ring with spring-catches carried thereby, and ears *i i'* on said catches, substantially as and for the purpose set forth.

3. As a new article of manufacture, a protecting-ring for the pivot-points of type-bars of a type-writing machine, comprising a covering-ring having a flange, spring-catches adapted to hold the same in position, and holding-pins for the ribbon-guides, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS H. STACKHOUSE.

Witnesses:

JNO. E. PARKER,
EUGENE ELTERICH.