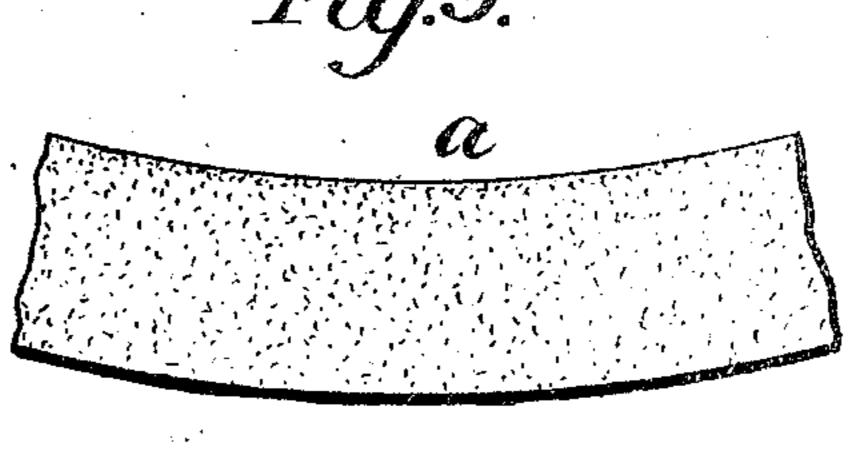
No. 798,079.

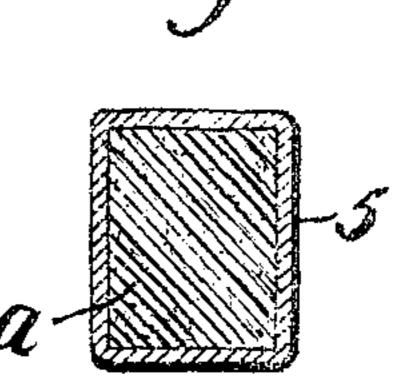
PATENTED AUG. 29, 1905.

## W. L. SMITH & C. GABRIELSON. TYPE BAR CUSHION. APPLICATION FILED OCT. 6, 1904.

Fig.4. Fig.3. Fig.5.

4





Witnesses Horfiellwan, J. Wilbert L. Smith Carl Gabrielson 3 Foster Freman Water attorneys

## UNITED STATES PATENT OFFICE.

WILBERT L. SMITH AND CARL GABRIELSON, OF SYRACUSE, NEW YORK, ASSIGNORS TO THE L. C. SMITH & BROS. TYPEWRITER COMPANY, OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

## TYPE-BAR CUSHION.

No. 798,079.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed October 6, 1904. Serial No. 227,413.

To all whom it may concern:

Be it known that we, Wilbert L. Smith and Carl Gabrielson, citizens of the United States, and residents of Syracuse, Onondaga county, State of New York, have invented certain new and useful Improvements in Type-Bar Cushions, of which the following is a specification.

This invention comprises a type-bar cushion or pad for type-writing machines adapted to normally support the free ends of the type-bars and to cushion the blows of the type-bars as they drop back from the platen, while preventing such rebounding of the bars as would cause them to interfere with each other.

The present invention relates to a cushion of peculiar structure which is sufficiently inelastic to prevent any material rebounding of the type-bar and which is soft enough to prevent any injury to the type-bar or any considerable noise due to its impact.

The invention will be described in detail in connection with the accompanying drawings, in which—

Figure 1 is a side view of a type-bar cushion and its support. Fig. 2 is a section of the same on the line 2 2 of Fig. 1 and showing a type-bar in side elevation. Fig. 3 is a vertical longitudinal section of the cushion shown in Figs. 1 and 2, and Figs. 4 and 5 are transverse sections of a similar cushion, showing different forms of envelops or covers.

Referring to the drawings, a indicates the type-bar cushion, 1 a support therefor, 2 a type-bar, and 3 its hanger. The support 1 may be of any suitable construction, its form being immaterial so far as the present invention is concerned. The character of the machine, whether the same be a front-strike machine or otherwise, is also immaterial.

The material of the cushion a is thick felt or similar material, having its interstices partially filled with rubber or similar material adhering to the fiber of the felt. The cushion is prepared in one way by saturating the felt strip with dissolved rubber and then permitting the solvent to evaporate, which leaves a coating of rubber on the fiber of the felt. The felt thus impregnated throughout with rubber or similar material forms a cushion which is durable, sufficiently soft to cushion

the type-bars without noise and sufficiently inelastic to prevent rebounding of the type-bars to such an extent that they might interfere with each other and detract from the 55 speed of the machine.

Other material than felt might be used for the cushion—such, for instance, as porous leather or knitted or woven fabric—and other adhesive material might be substituted for 60 the rubber; but we prefer to use a strip or rod of felt having rubber distributed throughout its mass, as above described.

In some instances our type-bar cushion may be used without an envelop or covering, as 65 shown in Figs. 1, 2, and 3, while in some cases it may be preferable to supply a covering, as shown in Figs. 4 and 5. In these figures 4 indicates a covering which consists of a strip having its edges sewed together, and 5 indicates a continuous covering which may be made by knitting or weaving.

It is well known that the speed with which a type-writing machine may be operated depends somewhat upon the effectiveness of the 75 pad for preventing rebound of the type-bar. If the pad be elastic, the bar would require some time to come to rest and an adjacent type-bar might collide with it if operated, causing loss of time and possible injury. The pad herein described is sufficiently elastic to keep its form, but not elastic enough to cause the type-bars to rebound to a degree that might result in collision. The cushion is practically noiseless and adapted to machines which 85 are operated at high speed.

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

1. A type-bar pad for type-writing machines 9° comprising a strip or bar of fabric permeated with adhesive material.

2. A type-bar pad for type-writing machines comprising a strip or bar of felt permeated with adhesive material.

3. A type-bar pad for type-writing machines comprising a strip or bar of fabric permeated with rubber, as set forth.

4. A type-bar pad for type-writing machines comprising a single strip of heavy felt treated 100 with rubber, substantially as set forth.

5. A type-bar pad for type-writing machines

comprising a strip of heavy felt treated with rubber, the said cushion being porous, as set forth.

6. A type-bar pad for type-writing ma-5 chines, comprising a strip of fabric or felt treated with a material adapted to adhere to the fiber of the felt and render the same less elastic, for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of 10 two subscribing witnesses.

WILBERT L. SMITH. CARL GABRIELSON.

Witnesses:

C. M. STEVENS,

C. F. Parsons.