(No Model.)

# C. H. ENGLISH.

## TYPE WRITER'S FINGER PROTECTOR.

No. 534,211. Patented Feb. 12, 1895.

Fig. 1.

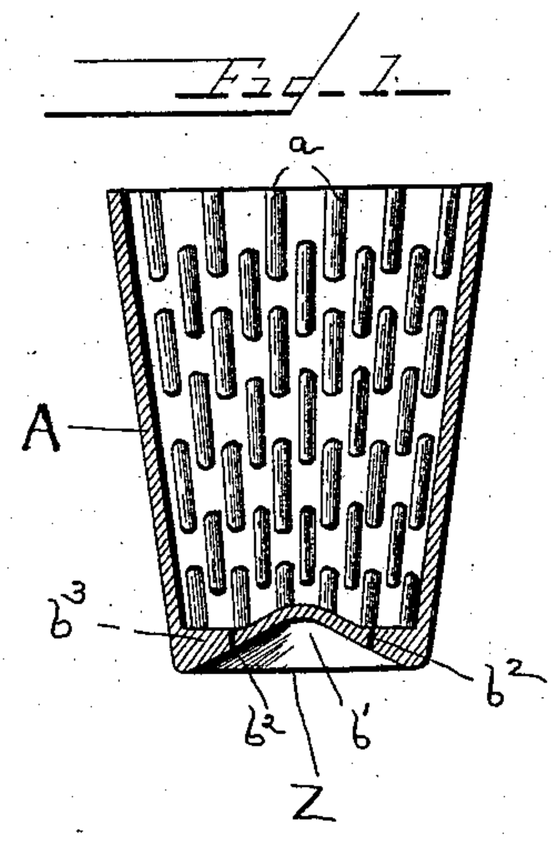
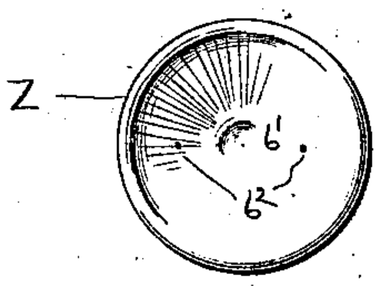



Fig. 2.




Witnesses
G. A. Tauberschmidt
C. T. Bell.

Inventor
Charles H. English
By Edwin S. Clarkson
his Attorney

# UNITED STATES PATENT OFFICE.

CHARLES H. ENGLISH, OF WASHINGTON, DISTRICT OF COLUMBIA.

## TYPE-WRITER'S FINGER-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 534,211, dated February 12, 1895.

Application filed April 20, 1892. Serial No. 429,868. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. ENGLISH, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Finger-Protectors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to finger protectors and it is an improvement on a similar invention shown in an application filed by me February 18, 1892, Serial No. 422,828, patented April 10, 1894, No. 518,027.

The object of my invention, is as in my other application to so construct a finger tip that the impact of the blow incident to striking the key of a typewriter, &c., will not be received on the end of the finger of the operator but will be received directly on the wall of the tip or guard while the finger end rests lightly upon a perforated buffer in the end of the tip. I also provide this improved tip with the alternately broken corrugations and the perforations between such corrugations all of which together with their advantages are fully set out in my former application. It will of course be understood, that I may use continuous corrugations without departing from the spirit of my invention and if found desirable I may entirely dispense with such corrugations but I prefer to use them.

In the drawings: Figure 1 is a longitudinal vertical section through my improved tip. Fig. 2 is a bottom view of the same.

A represents the tip composed of any suitable material, but preferably of soft rubber. This tip is made in different sizes on the order of gloves so that a person wearing a No. 5 glove can be supplied with a tip of the exact size as well a person wearing a larger one. *a* are the corrugations illustrated as broken and breaking joints with each other, so to speak, although they are entirely independent of each other. The finger is only compressed wherever the corrugations touch it and even then such compression is very slight as it has been found that the adhesion between the rubber and the flesh is sufficient to hold a comparatively loose tip or guard on the finger end.

The lower end of the tip or guard is concaved on the under side as at *b'* thereby forming a buffer for the end of the finger. This buffer is perforated as at $b^2$ through which air enters and circulates between the corrugations and around the finger. $b^3$ indicates solid rubber between the sides of this buffer and the walls of the tip or guard thereby strengthening the buffer. In practice the finger end will rest lightly upon the buffer between the perforations $b^2$. The buffer consists substantially of one half of a hollow ball inserted and cemented or otherwise secured between the walls of the tip or guard; or the buffer may consist of a hollow cone shaped body. Around this buffer on the bottom is a rim Z forming the extreme end of the tip or guard.

It will be supposed that the tip has been put on the finger end and a blow struck. The impact of the blow will be received on the rim Z and conveyed to the walls of the tip or guard and it will be found that the finger end is still resting lightly on the top of the buffer. In the event of an extremely hard blow it will be found that the top of the buffer will be depressed to a certain degree by the end of the finger thereby obviating any damage or blunting of the finger.

In the manufacture of this device I may mold the tip or guard and the buffer separately and cement the buffer in the lower end of the guard in a well known manner or I may if preferred mold the entire device integrally, either way being practical as every one versed in the manufacture of rubber goods knows.

What I claim, and desire to secure by Letters Patent, is—

1. A tip having a buffer on its lower end and provided with a rim to receive the impact of the blow.

2. A tip provided with a concaved perforated buffer for the purpose described.

3. A tip provided with a perforated buffer and a rim, said rim forming the extreme end of said tip and adapted to receive the impact of a blow for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. ENGLISH.

Witnesses:
EDWIN S. CLARKSON,
M. DORIAN.