H. H. McELROY.

Arm-Rest for Writers.

No. 226,411. Patented April 13, 1880.

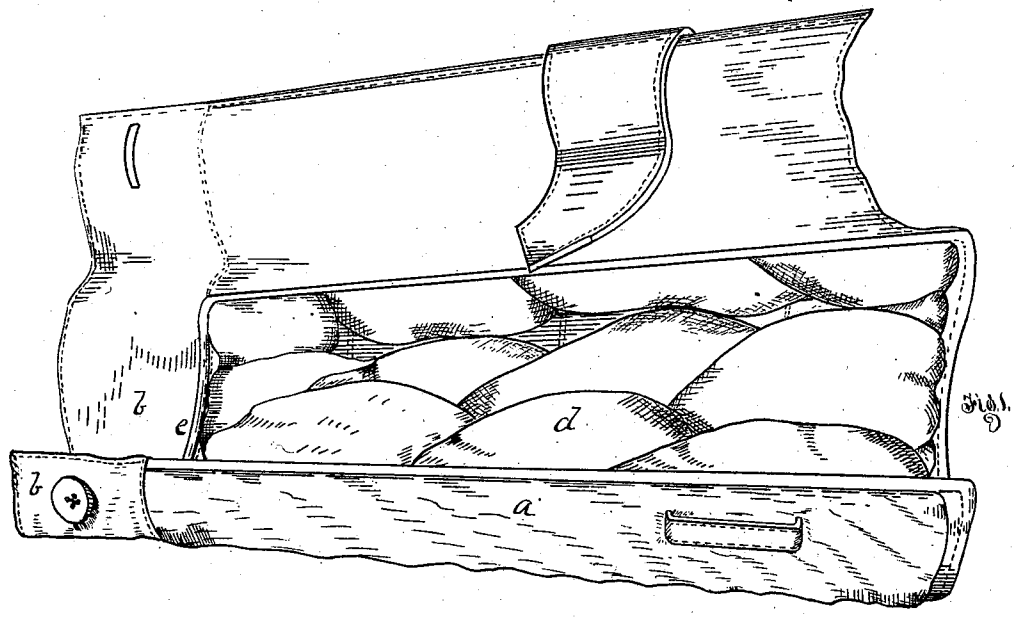


Fig. 1.

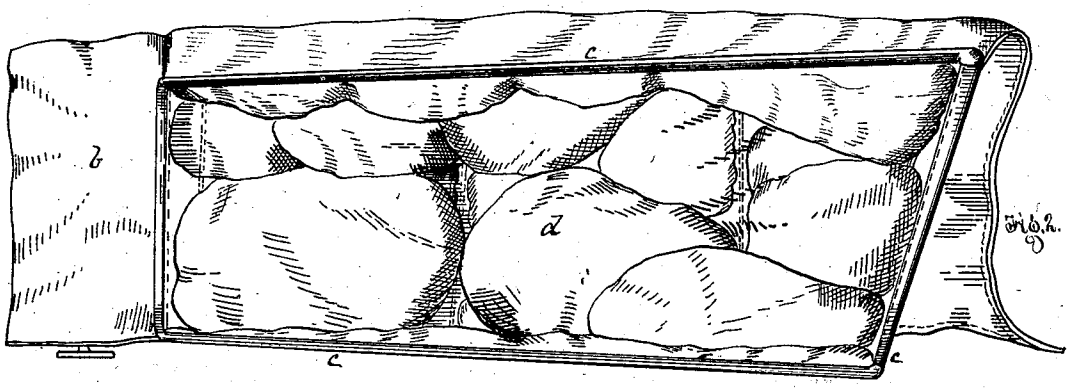


Fig. 2.

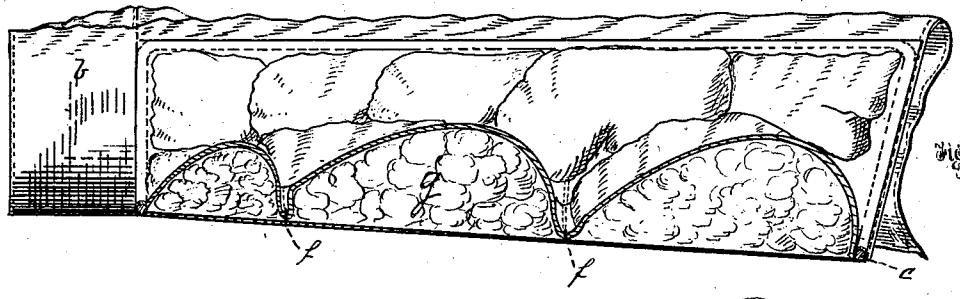


Fig. 3.

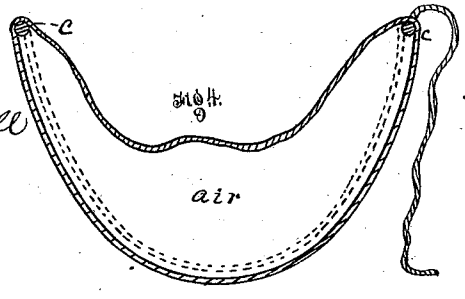


Fig. 4.

Witnesses.

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HUGH H. McELROY, OF PITTSBURG, PENNSYLVANIA.

ARM-REST FOR WRITERS.

SPECIFICATION forming part of Letters Patent No. 226,411, dated April 13, 1880.

Application filed August 11, 1879.

To all whom it may concern:

Be it known that I, HUGH H. MCELROY, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Writers' Protective Sleeve; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my improved protective sleeve for writers, telegraph-operators, engravers, and other similarly-employed persons. Figs. 2, 3, and 4 are plan and sectional views of the under section of my improved sleeve.

Like letters of reference indicate like parts in each.

From careful observation and personal experience I have come to the conclusion that writers' cramp, telegraphers' paralysis, and kindred nervous affections of the arm and fingers are produced by the constant pressure and weight of the arm on the nerves and blood-vessels of the under side of the arm, and especially upon that portion of the same which rests on the desk or table.

The object of my invention is to provide a comfortable rest or support for the arm, which will distribute the weight equally along the whole fore-arm, and which will not interfere with its free use.

My invention therefore consists in a soft elastic cushion of such shape as to give the length of the lower fore-arm a uniform bearing on the table, and this cushion I inclose by and combine with a spring-frame, so that the cushion forms the under side of a protecting-sleeve for the arm, such as is now used to prevent the soiling of sleeves.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

I make a sleeve, *a*, having a wristband, *b*, and a buckle and strap to secure it to the arm. The under side of this sleeve is provided with a soft elastic pad or cushion, *d*, upon which the arm rests when employed. This cushion I prefer should be concave, as at *e*, so that the edges shall bear their share of the weight, and I prefer to fill it with air, as that is lighter, cooler, and cleaner than any substantial filling, and possesses the property of adjusting itself to the position of the arm.

In order, however, to control the air, I divide the cushion, by the partitions *f*, into a number of compartments, *g*, each of which contains the desired quantity of air or other elastic filling.

Any soft yielding substance, such as wadding, feathers, or the like, or even light and elastic springs, may be used to compose the cushion.

I construct the sleeve with a spring-frame, *c*, which will spring over or around the arm and secure the cushion from slipping.

The sleeve *a* is made of any suitable material.

The cushion may have the form of a sleeve to be drawn over the arm.

In some employments, where the arm is not moved from its position on the desk or table, such as engraving or telegraphing, the cushion may be attached to the desk or table at the place where the arm rests thereon; but in writing and like employments, where the arm is frequently moved, it should be worn on the sleeve.

By this means I am enabled to distribute the pressure of the weight of the arm over the whole under surface of the fore-arm, instead of its being concentrated on one spot, the result of which, as proven by actual experience, is the total absence of those sensations of numbness and fatigue which are the common attendants of any prolonged use of the pen, engravers' tool, or telegraphic instrument, and also the avoidance of the usual nervous affections of the hand and fingers arising from this source. It also improves the penmanship by supporting and steadying the arm, while not detracting from its ease of motion.

A flexible arm rest or support has heretofore been devised wherein a circular metallic plate of concave form, so that it would apply itself to the arm, has been employed in conjunction with a supporting-spring; and I do not claim such devices, as in the same the arm rests upon a surface incapable of change in form, whereby it might adapt its shape to the changing shape of the fore-arm arising from muscular action, whereas in my device the change of the form of the bed or rest surface is essential, and there-

fore I have mentioned an air-cushion as one of the most desirable methods of carrying out my invention.

What I claim as my invention, and wish to secure by Letters Patent, is—

1. In an arm-rest for writers, the combination, with one or more flexible pliable pads, of an inclosing spring-frame, substantially as and for the purpose specified.

2. In an arm-rest, the combination of a spring-frame, *c*, and a flexible cushion divided into compartments by a series of partitions, substantially as and for the purpose specified.

In testimony whereof I, the said HUGH H. MCELROY, have hereunto set my hand this 5th day of August, 1879.

HUGH H. MCELROY.

Witnesses:

C. E. MILLIKEN,

T. B. KERR.