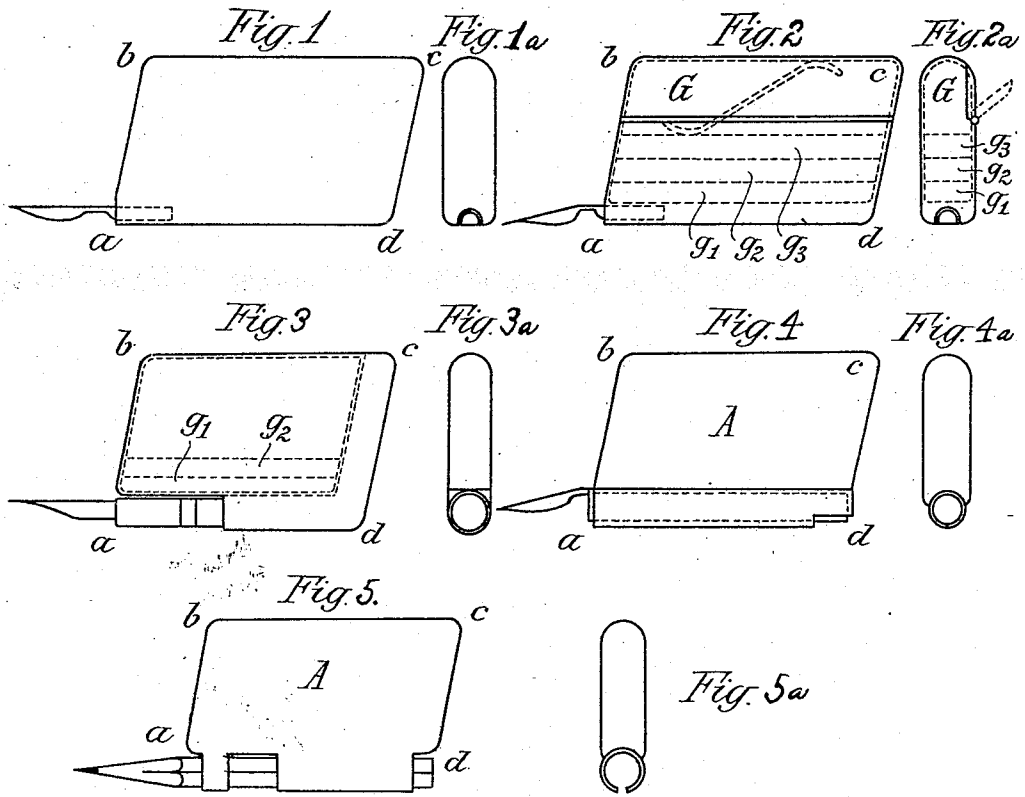
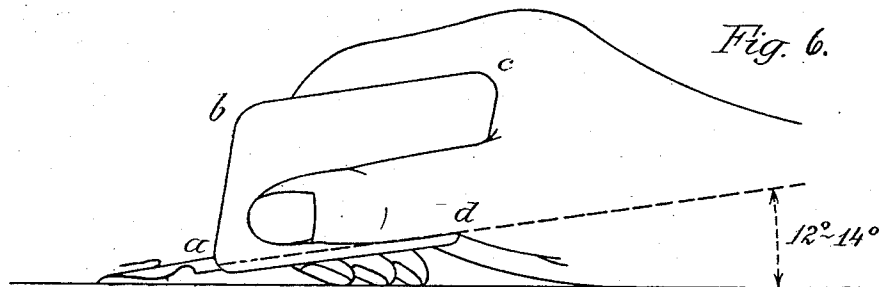
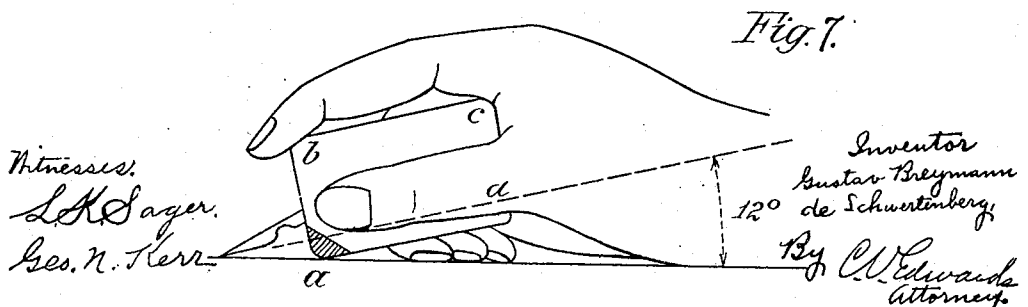


No. 825,985.

PATENTED JULY 17, 1906.

G. B. DE SCHWERTENBERG.
HOLDER FOR PENS, PENCILS, AND THE LIKE.

APPLICATION FILED AUG. 21, 1905.



UNITED STATES PATENT OFFICE.

GUSTAV BREYMAN DE SCHWERTENBERG, OF BUDAPEST, AUSTRIA-HUNGARY.

HOLDER FOR PENS, PENCILS, AND THE LIKE.

No. 825,985.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed August 21, 1905. Serial No. 274,984.

To all whom it may concern:

Be it known that I, GUSTAV BREYMAN DE SCHWERTENBERG, dipl. civil engineer, a subject of the Emperor of Austria-Hungary, residing at Budapest, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Holders for Pens, Pencils, and the Like, of which the following is a specification.

This invention relates to an improved penholder without shaft.

Hitherto for the purpose of writing with ink, india-ink, or other fluids ordinary penholders have been constructed of various materials in the form of a stick or shaft and known as "penholders." Moreover, all kinds of painting-brushes, styluses, or pencils have a prolonged shaft-shaped form which usually projects above the hand of the user. The holder during the writing is held in a steeply-inclined position. The hand and the wrist-joint are turned inward and upward. This compulsory attitude soon causes the fingers and the wrist-joint to become tired.

The remedies prescribed against "writers' cramp"—such as holding the penholder in an inclined position, the use of finger-holders, or of cork or rubber balls or lumps of gypsum upon the holders—are only palliatives, which, however, can never succeed in restoring the legibility or correctness of the writing. Consequently there is a need for the construction of a penholder which prevents the becoming tired through the natural and convenient position of the fingers and hand, and thus greatly increases the capacity for working. This object is attained by means of the use of the holder hereinafter described in connection with the accompanying drawings, wherein—

Figure 1 is a profile of the penholder. Fig. 1^a shows the front design of same. Fig. 2 shows a form of finishing of the penholder with weight load; Fig. 2^a, the front design of same. Fig. 3 shows the penholder improved to a fountain-pen; Fig. 3^a, the front design of same. Fig. 4 is a penholder in connection with a usual short pen-style; Fig. 4^a, a front design of same. Fig. 5 shows a penholder in connection with a short pencil; Fig. 5^a, the front design of same. Fig. 6 shows how the penholder is held at the usual manner of

writing. Fig. 7, however, shows the holding during cramp.

Referring to Fig. 1, the improved holder has the form of a trapeze or a quadrangular block. The pen is arranged at *a*. The body *a b c d* can either be solid, Fig. 1, or hollow, Figs. 2 and 3, and may be made of any suitable material. As in consequence of prolonged writing there is produced a tension in the nervous and muscular system of the hand and of the lower arm, in consequence of which involuntary muscular motions occur, it is advisable in the case of prolonged writing to take either a solid holder of a heavier material or the holder may be so constructed as to contain a hollow space *G*, Fig. 2, in which small plates *g' g² g³*, &c., or weights can be placed, so that in this manner the holder may be successively more and more weighted. The weighting of the holder can take place in proportion to the tiredness or the occurring tension or cramp. Fig. 3 illustrates a holder constructed in the form of a fountain-pen, which can be loaded by plates *g' g²*.

In another modification, Figs. 4 and 5, one of the improved holders *A* of the form *a b c d*, Fig. 1, may be placed upon an ordinary penholder or the like with or without a shortened shaft or upon a pencil or crayon. This addition *A* can either be solid or hollow, with or without weights, and made of any convenient material. When in use, as illustrated in Fig. 6, the holder is taken in the hand. The back of the hand is thereby held more straight and in a natural position and not twisted. The three first fingers have a sufficient surface for support. The lower fingers are not obliged to be raised, as is ordinarily the case, but rest more upon the writing-table. The plane of the table forms with the axis of the pen an angle of only twelve to fourteen degrees, whereas this angle in the case of the ordinary penholder amounts to thirty-eight to forty-two degrees or even more.

In the use of the improved pen or writing-material holder there is found in consequence of its construction a uniform division of the labor over the fingers, the wrist-joint, the lower arm, and the elbow, whereas hitherto the fingers and wrist were too much exercised. The elastic motion during the writing

with an ordinary penholder is effected only by the pressure of the fingers and the resistance of the point of the pen, whereas in the improved holder the fingers are relieved from this pressing work, because the counter reaction of the thumb-muscle, (adductor, *musculus intersseus*,) at *c d* in Fig. 6, renders this service sufficiently. The automatic interchange between the aforesaid muscle and the point of the pen supported by slight non-compulsory motion of the fingers prevents the fingers from becoming prematurely tired. The natural straight holding of the resting hand prevents the premature tiring of the wrist. The bodies hitherto proposed in the case of writers' cramp, which were placed upon the penholder, were so arranged that they completely filled the hand. Consequently the above-mentioned mobility of the fingers was impossible. On the other hand, the penholder *a b c d* of my construction is so arranged that it does not fill the hand, but admits of a certain mobility of the fingers, whereby writing is rendered much easier. The required mobility is also increased thereby that the penholder does not unnecessarily project above the hand, but is entirely inclosed within the hand and is surrounded by the hand.

Another modification, Fig. 7, is adapted for the use of those who suffer much from writers' cramp. In this modification the index-finger is placed at the upper front part of the holder *a b c d*, and the lower angle *a* of the holder is constructed according to requirement as a point of support and provided with a smooth cover, so that it can slide easily over the paper and is constructed for this purpose.

The advantages obtainable by the use of the above-described pen, pencil, or the like

holders as compared with previous devices will be sufficiently obvious from the foregoing.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. As an article of manufacture, a holder for penholders, pencils, or the like, comprising a flat, elongated block having parallel sides adapted to be grasped between the thumb and index-finger and having attaching means for the penholder, pencil or the like, substantially as described.

2. As an article of manufacture, a weighted holder for penholders, pencils or the like, comprising a flat, elongated block having parallel sides adapted to be grasped between the thumb and index-finger, and having attaching means for the penholder, pencil, or the like, substantially as described.

3. As an article of manufacture, a holder for penholders, pencils or the like, comprising a flat, elongated block having parallel sides adapted to be grasped between the thumb and index-finger, having a bearing-surface constructed to slide over a support, and having attaching means for the penholder, substantially as described.

4. As an article of manufacture, a holder for penholders, pencils or the like, comprising a hollow parallel-sided block-shaped body, having attaching means for a penholder, pencil or the like, substantially as described.

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

GUSTAV BREYMAN DE SCHWERTENBERG.

Witnesses:

FÜLÖP SCHÖN,
DONNER FLOMA.