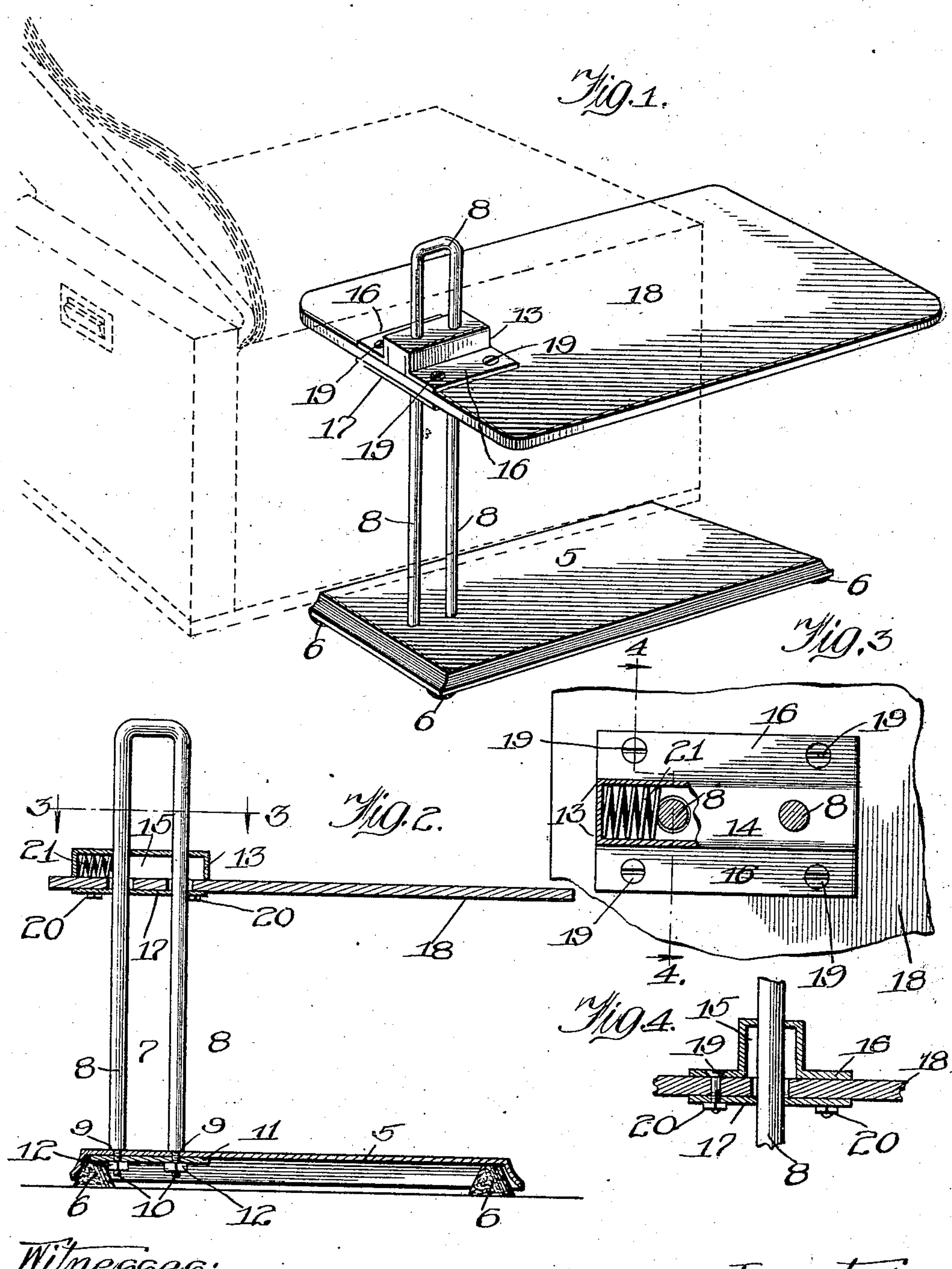
No. 848,991.

PATENTED APR. 2, 1907.

F. R. HARVEY.

HAND REST.

APPLICATION FILED JULY 16, 1906.



Witnesses:
G. V. Domarus.
Robt. H. Weir

Inventor:
Frank R. Harvey
By Bond Adams Pickard Jackson
Attys.

UNITED STATES PATENT OFFICE.

FRANK R. HARVEY, OF HOUGHTON, MICHIGAN.

HAND-REST.

No. 848,991. Specification of Letters Patent. Patented April 2, 1907.

Application filed July 16, 1906. Serial No. 326,456.

To all whom it may concern:

Be it known that I, FRANK R. HARVEY, a citizen of the United States, residing at Houghton, in the county of Houghton and State of Michigan, have invented certain new and useful Improvements in Hand-Rests, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to hand-rests for bookkeepers' use which enables the adjustment of the hand-support to various heights to correspond with the thickness of the book upon which it is desired to write. In hand-rests for this and similar purposes it is desirable that the platen or board which supports the hand should be easily and readily adjustable to different heights, that the platen should automatically support itself upon the standard at any height or position in which it may be placed, and that the weight of the hand of the writer resting upon the platen should firmly bind the platen and hold it at the adjusted height. It is further necessary for efficient use that the platen should be firmly supported upon the standard upon which it is adjustably mounted and in such a way as to maintain its parallelism with the base-support and not turn from side to side thereon, and it is further necessary that such a device should be conveniently, easily, and readily adjustable.

It is the object of my invention to provide a new and improved hand-rest which shall attain these objects.

In the drawings, Figure 1 is a perspective view of my new and improved hand-rest, showing its position when in use, the book being shown in dotted lines. Fig. 2 is a longitudinal section. Fig. 3 is an enlarged detail, being a section on line 3 3 of Fig. 2, with a part of the upper plate broken away; and Fig. 4 is an enlarged detail, being a section on line 4 4 of Fig. 3.

Referring to the drawings, 5 indicates the base, which is preferably formed of metal stamped to suitable shape, although it may of course be formed of any other suitable material. The base is of sufficient size and area to form a firm support for the parts mounted thereon and hereinafter described. The base is preferably provided with rubber feet 6.

7 indicates a standard, which is composed of a rod of steel or other suitable material bent twice at right angles to form two parallel upright portions 8 8. The lower ends of the parallel portions 8 8 of the standard 7 are cut away to form shoulders 9 and a smaller end portion 10, which is adapted to pass through suitable openings in the base 5, registering therewith. These ends are screw-threaded.

11 indicates a washer provided with openings registering with the openings in the base 5 and adapted to receive the smaller screw-threaded ends 10 and which is placed upon the under side of the base 5. The standard 7 is secured in place by nuts 12, screwed upon the screw-threaded ends of the standard 7.

13 indicates a plate, which is formed of any suitable material, preferably metal, and is provided with a raised portion 14, extending longitudinally of the plate 13 and preferably stamped in the plate. This raised portion 14 forms a recess 15, which is closed at both ends. The raised portion 14 of the plate 13 is provided with two openings which are adapted to receive the upright portions 8 8 of the standard 7 and conform closely thereto, so that there may be no play between the plate and the standard, but permitting the plate to move freely longitudinally of the standard. Upon each side of the central raised portion 14 of the plate 13 are flat projecting portions 16, adapted to bear upon the platen, hereinafter described.

17 indicates a flat plate of any suitable material, preferably of metal, which is provided with two openings which register with the openings in the plate 13 and are adapted to receive the upright portion 8 of the support 7. The openings are of such size as to conform closely to the uprights 8, but to permit the plate to move freely up and down said standards.

18 indicates a thin platen of any suitable material, preferably of wood, which is provided with openings near one end through which the uprights 8 of the standard 7 pass and which is adapted to be clamped between and secured to the plates 13 and 17 by means of bolts 19, which pass through suitable openings in both plates and nuts 20. The openings through the platen through which the standards 7 pass when the platen is in position are preferably made somewhat larger than the upright portions 8 of the standard in order

to prevent the binding of the parts when it is desired to adjust the platen, the platen being supported in any desired position by the bearings of the plates 13 and 17 on the standard, as hereinafter described. The platen 18 is preferably of rectangular shape and of a somewhat larger size than the base, so that when the base is placed against the book one edge of the platen may extend somewhat over the leaf of the book to be written upon, as is shown in Fig. 1.

21 indicates a coiled expansion-spring that is placed in the recess 15 between the upright 8, which is nearest the end of the platen, and the end of the recess 15 and bears against said upright and against the end of the recess. The function of the spring is to operate against the weight of the other end of the platen, and thus prevent chattering of the platen as it is raised or lowered and to facilitate in the easy adjustment of the parts.

It will be seen from the above description that the distance between the lower plate 17 and the upper portion of the raised portion 14 of the plate 13 is such that bearings are afforded between the two plates 13 and 17 and the standards 8, which by reason of the weight of the platen will cause the platen to remain at any position at which it may be adjusted, the spring 21 not being of sufficient tension to entirely overcome the weight. At the same time it will be obvious that by a very slight pressure of the hand upon the top of the plate 13 between the uprights 8 of the standard 7 or at the outer end over the spring will overcome the weight of the board and the platen will slide downward on the support to any required position, when, the pressure being removed, the platen will remain at the adjusted height. It is also obvious that when the weight of the hand is laid upon the platen in writing the platen will, by reason of the pressure and the bearing of the plates upon the standard, firmly support the weight of the hand in writing at any position at which it may be adjusted. At the same time, the standard being of such form as to prevent the rotation of the platen upon it, the platen will be maintained in constant parallelism with the base and prevented from moving from side to side in use. It will also be evident that the platen may be very readily raised to any required height and, as has been said above, will remain in any position in which it is set. The double uprights of the standard being separated from one another longitudinally of the platen insure the firmness of the standard and rigidity of support against the weight of the hand of the writer when in use.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. In a hand-rest, the combination with a base, and a standard mounted on said base and adapted to prevent the rotation thereon of the parts supported thereby, of a plate slidingly mounted on said standard, a spring bearing against said standard and the outer end of said plate, and a platen secured to said plate, substantially as described.

2. In a hand-rest, the combination with a base, and a standard mounted on said base and adapted to prevent the rotation thereon of the parts supported thereby, of a plate having a recessed portion to form a longitudinal recess and having openings in said recessed portion whereby said plate is slidingly mounted on said standard, a spring in said recess bearing against said plate and said standard, a second plate slidingly mounted on said standard, and a platen secured between said plates, substantially as described.

3. In a hand-rest, the combination with a base, and a support having two parallel upright rods secured to said base, of a plate provided with openings conforming to said upright portions of said standard and slidingly mounted thereon, a second plate having openings conforming to the uprights of said standard and slidingly mounted thereon, and a platen secured between said plates, substantially as described.

4. In a hand-rest, the combination with a base, and a support having two parallel upright rods secured to said base, of an upper plate having a raised portion forming a longitudinal recess and having openings therein conforming to said uprights whereby said plate is slidingly mounted thereon, a lower plate having openings to conform to said uprights of said standard and registering with the openings in the upper plate whereby said lower plate is slidingly mounted on said standard, and a platen secured between said plates, substantially as described.

5. In a hand-rest, the combination with a base, and a support having two parallel upright rods secured to said base, of an upper plate having a raised portion forming a longitudinal recess and having openings therein conforming to said uprights whereby said plate is slidingly mounted thereon, a spring mounted in said recess and bearing against the outer end thereof and the adjacent upright, a lower plate having openings to conform to said uprights of said standard and registering with the openings in the upper plate whereby said lower plate is slidingly mounted on said standard, and a platen secured between said plates, substantially as described.

6. In a hand-rest, the combination with a base, and a standard composed of two upright parallel rods connected at the top and secured at the lower ends to said base, of an upper plate having a raised portion forming a longitudinal recess and having openings therein conforming to said uprights whereby said plate is slidingly mounted thereon, a

spring mounted in said recess and bearing against the outer end thereof and the adjacent upright, a lower plate having openings to conform to said uprights of said standard and registering with the openings in the upper plate whereby said lower plate is slidingly mounted on said standard, and a platen secured between said plates, substantially as described.

FRANK R. HARVEY.

Witnesses:
ARTHUR P. KLENNER,
FRANK L. HEALY.