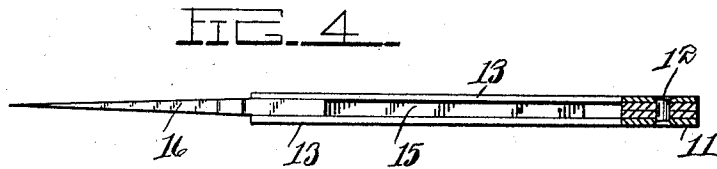
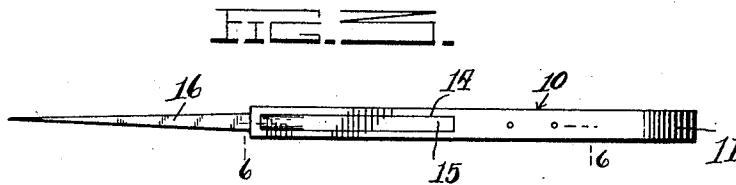
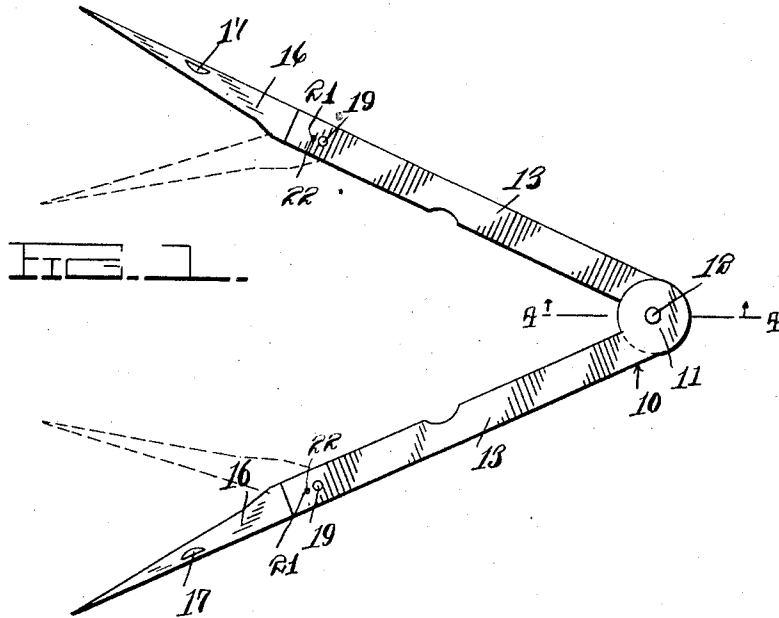


M. E. SMITH.
FOLDING POCKET DIVIDERS.
APPLICATION FILED MAY 12, 1911.

1,007,807.

Patented Nov. 7, 1911.

2 SHEETS—SHEET 1.



Inventor
Marvin E. Smith.

Witnesses
J. W. Taylor.
Harry M. Test.

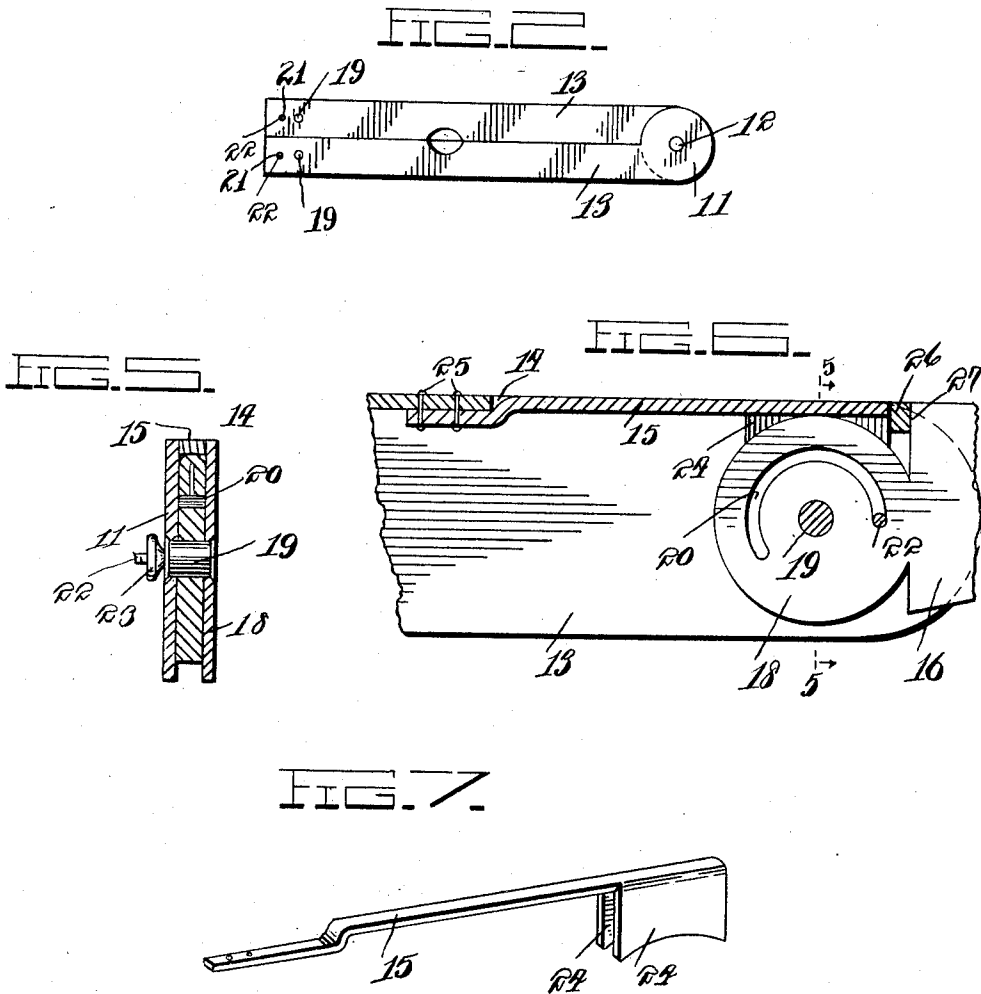
By *Harry Ellis Chandler*

Attorney

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UNITED STATES PATENT OFFICE.

MARVIN ELMER SMITH, OF HAZEL GREEN, WISCONSIN.

FOLDING POCKET-DIVIDERS.

1,007,807.

Specification of Letters Patent.

Patented Nov. 7, 1911.

Application filed May 12, 1911. Serial No. 626,692.

To all whom it may concern:

Be it known that I, MARVIN ELMER SMITH, a citizen of the United States, residing at Hazel Green, in the county of Grant and State of Wisconsin, have invented certain new and useful Improvements in Folding Pocket-Dividors, of which the following is a specification.

This invention relates to improvements in drawing instruments, and has particular reference to dividers.

Another object is to provide a pair of dividers having pivoted pointed members which are adjustable to provide calipers.

In the drawings: Figure 1 is a side elevation of the dividers in open position and distended, Fig. 2 is a view showing the device folded and closed, Fig. 3 is an edge view of the device in open position, Fig. 4 is a section on the line 4—4 of Fig. 1, looking in the direction of the arrows, Fig. 5 is a sectional view on the line 5—5 of Fig. 6, looking in the direction of the arrows, Fig. 6 is a section on the line 6—6 of Fig. 3, Fig. 7 is a perspective view of the spring.

Referring particularly to the drawings, 10 represents the legs of the compasses or dividers, which are provided at their upper ends with the head 11 mounted on the pivot pin 12. Each of the legs is formed of a single piece of metal, doubled on itself to form the parallel sides 13. In the back of the leg, and near its outer end, is formed an elongated slot 14, in which is adapted to move the spring 15, which is secured at one end to the back of the leg. Pivoted between the sides of each of the legs, and at the outer end thereof, is a pointed blade 16 having a groove 17, whereby the groove may be engaged by the finger nail to open the same. The blades 16 are adapted to be folded within the legs and between the sides, so that the dividers may be folded and conveniently carried in the pocket. The pivotal ends of the blade 16 are formed with a rounded flat head 18 mounted on a pivot pin 19. Formed in each of the heads 18 and concentrically with the pivot pin 19 is a segmental slot 20, and in each of the sides 13 is formed an opening 21, through which passes the bolt 22, having on one end an adjusting or tightening nut 23. Thus each of the blades may be swung on its pivot and by tightening the nut 23 the same may be held rigidly in any position within the length of the flap 20.

When the device is used simply as a di-

vider or compass, the blades 16 are extended to their full length, and held in such position by the nut 23. When it is desired to use the device as an outside caliper the blades are swung on their pivot until the desired measurement is gotten, when the nut 23 may be tightened to hold the same in such position.

The spring 15 is formed of a single piece of flat steel having at one end the wings 24 which are bent downwardly in parallel relation, and have their lower edges formed with concaved faces, which extend longitudinally in the direction of the length of the plate. The spring 15 is secured to the back of each of the legs 10 beyond one end of the slot 14, by means of the rivets 25, while the opposite end extends over the head 18 of the blade, and engages with its concaved faces against the curved edges of the head 18. The spring 15 frictionally engages the head 18, and serves to hold the blade in different adjusted positions, but to insure the positive position of the blade, the nut 23 is tightened. The portion 26 of the back at the end of the slot 14, comprises a bearing for the shoulder 27 of the blade. In each of the legs 10 is formed a pair of aligned curved notches, through which the blades may be grasped by the fingers when the same are closed.

From the foregoing it will readily be seen that I have provided a simple, and efficient device of this character, which has means for adjusting and holding the blades at different adjusted positions.

What is claimed is:

1. A combined dividers and calipers comprising a pair of legs pivoted at one end, each of said legs being formed of a single piece of metal doubled on itself, each of said legs having an elongated slot, blades, flat circular heads on said blades, said heads pivotally mounted in the ends of said legs, and springs secured to said legs, and extending within said elongated slots, said springs having downturned portions on their free ends, said downturned portions engaging frictionally with the said round flat heads.

2. A combined dividers and calipers comprising a pair of legs pivoted at one end, each of said legs being formed of a single piece of metal doubled on itself, each of said legs having an elongated slot, blades, flat circular heads on said blades, said heads piv-

otally mounted in the ends of said legs, each of said heads having a curved slot arranged concentrically with the pivot of the head, each of said legs having a clamping screw
5 passed through the curved slot of the head, and leaf springs secured to the legs and frictionally engaging with the said heads, whereby the said blades are held frictionally

by the said spring, and positively by the clamping screw. 10

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

MARVIN ELMER SMITH.

Witnesses:

W. F. STRASSER,

M. J. BERG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
