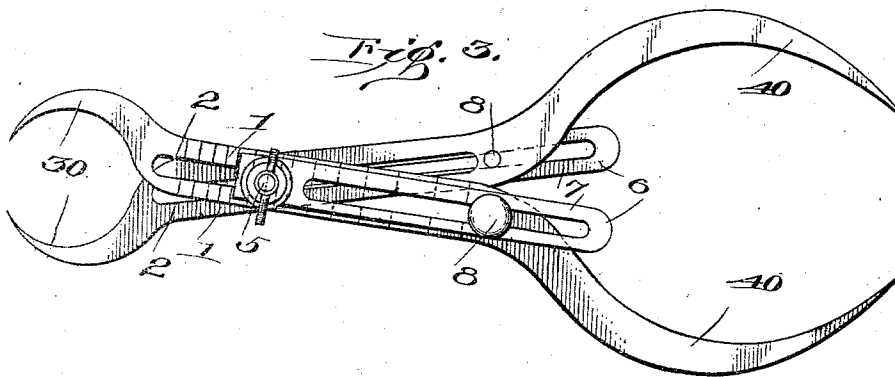
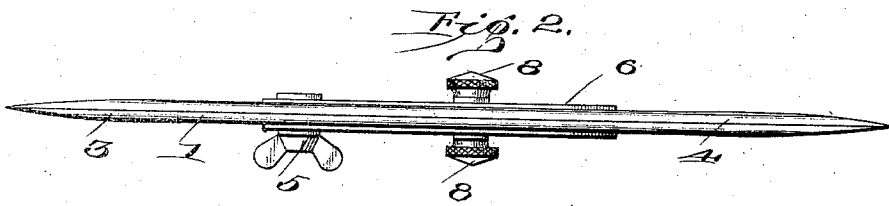
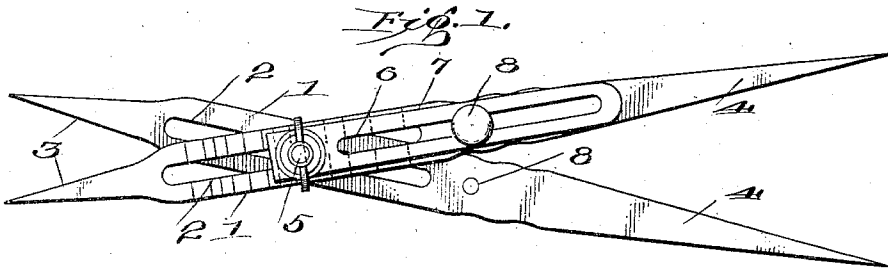


No. 753,221.

PATENTED MAR. 1, 1904.

A. BASOLA.  
PROPORTIONAL DIVIDERS.  
APPLICATION FILED JUNE 12, 1903.

NO MODEL.



WITNESSES:

*Allan Goose,*  
*J. B. Cybas,*

INVENTOR

*Antonio Basola*  
BY  
*J. P. Littell*  
ATTORNEY,

# UNITED STATES PATENT OFFICE.

ANTONIO BASOLA, OF NEW YORK, N. Y.

## PROPORTIONAL DIVIDERS.

SPECIFICATION forming part of Letters Patent No. 753,221, dated March 1, 1904.

Application filed June 12, 1903. Serial No. 161,123. (No model.)

*To all whom it may concern:*

Be it known that I, ANTONIO BASOLA, a citizen of the United States, and a resident of New York, in the county and State of New York, have invented certain new and useful Improvements in Proportional Dividers, of which the following is a specification.

My invention relates to improvements in proportional dividers.

One object of my invention is to provide means by which the pivot-pin upon which the arms of the dividers swing may be securely held in its adjusted position, so that when the dividers have been once adjusted to any particular proportion there will be no danger of this adjustment being disturbed.

In the drawings, Figure 1 is a plan view of an ordinary proportional divider having my invention applied thereto. Fig. 2 is a side view of the same. Fig. 3 is a plan view of proportional calipers.

Corresponding parts in all the figures are denoted by the same reference characters.

In using proportional dividers of the ordinary style it is usually necessary to take a large series of measurements with the dividers adjusted to the same proportion. In doing this it often happens that the position of the pivot-pin within the slot becomes shifted, thus destroying the former proportion between the different ends of the divider and sometimes causing serious trouble in carrying out the work then in hand. By the use of my improvement in proportional dividers the probability of such disturbance of the adjustment is very slight.

Referring to Fig. 1, in which a proportional divider having my invention attached thereto is shown in opened position, 1 1 represent two arms which in accordance with the usual construction are provided with the central slots 2 2. 3 3 represent the short arms or ends of the divider, and 4 4 the long ends or arms. Passing through the slot in each arm is a pivot-pin 5, which is provided with a suitable nut. Outside of each arm is a holding arm or bar 6, which is provided with an opening adapted to snugly receive the pivot-pin and a longitudinal slot 7. Passing through

the slot 7 and screwing into the body of the arm 4 is a clamp-screw 8, which is provided with a head of such character that it may be readily engaged and turned by the hand. Two of these holding arms or bars are provided—one upon each arm of the divider. By this means the pivot-pin 5 is securely held in its adjusted position in each arm and the liability for displacement is very much lessened. At the same time the pivot-pin 5 may act as a clamp-pin, which further insures against displacement.

The calipers shown in Fig. 3 are constructed upon the same principle—that is, are, in effect, the same instrument as shown in Fig. 1, except that the arms 30 30 and 40 40 are curved instead of being straight, as shown in Fig. 1. The surface of the arms of the calipers or divider may be provided with the usual scale indicating the proportions or relative sizes to which the device may be adjusted.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claims.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A proportional divider comprising two members each having a long arm and a short arm formed therewith, and a longitudinal slot, two holding members, a longitudinally-adjustable pivot passing through the ends of the holding members and through the slots in the first-mentioned members, and means for adjustably securing the holding members to the first-mentioned members, substantially as described.

2. A proportional divider comprising two members each having a long arm and a short arm formed therewith and a longitudinal slot, two holding members each having a longitu-

dinal slot, a longitudinally-adjustable pivot  
 passing through the ends of the holding mem-  
 bers and through the slots in the first-men-  
 tioned members, and clamping-screws carried  
 5 by each of the first-mentioned members and  
 passing through the slot in its holding mem-  
 ber, substantially as described.

In testimony whereof I have signed my name  
 in the presence of the subscribing witnesses.

ANTONIO BASOLA.

Witnesses:  
 J. C. PYBAS,  
 J. M. HOCTOR.