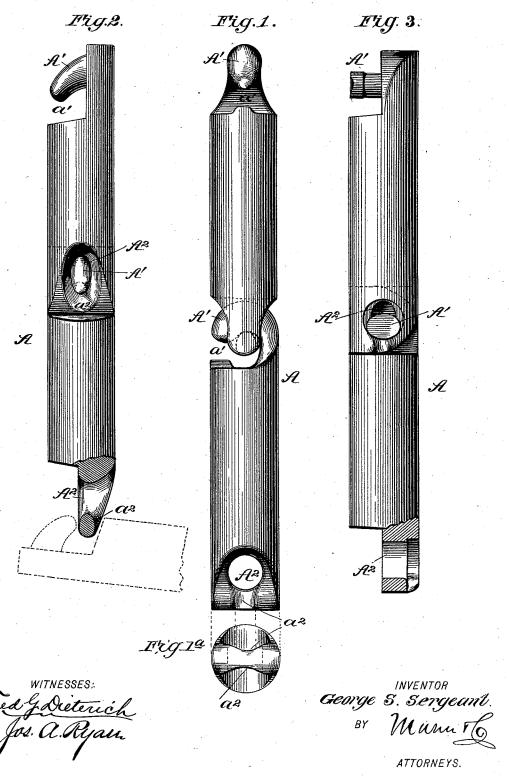
## G. S. SERGEANT.

SASH WEIGHT.

No. 522,498.

Patented July 3, 1894.



## UNITED STATES PATENT OFFICE.

GEORGE S. SERGEANT, OF GREENSBOROUGH, NORTH CAROLINA.

## SASH-WEIGHT.

SPECIFICATION forming part of Letters Patent No. 522,498, dated July 3, 1894.

Application filed February 1, 1894. Serial No. 498,734. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. SERGEANT, of Greensborough, in the county of Guilford and State of North Carolina, have invented a new 5 and useful Improvement in Sash-Weights, of which the following specification is a description, reference being had to the accompanying drawings, forming part thereof, in which-

Figure 1, is a side view of one form of my to improved sash weight. Fig. 1° is an inverted plan view of the same. Fig. 2 is a side view of another form of my improved sash weight. Fig. 3 is a similar view of third form of same.

My invention relates to new and practical 15 modes of connecting and interlocking two or more short or light weights, and forming thereby a heavier weight.

I am aware that sectional sash weights are not broadly new, but the means used hereto-20 fore to connect them have been so defective that practice has demonstrated their impracticability. The advantages to the manufacturer of and dealer in sash weights of a thoroughly practicable sectional sash weight are 25 great, in that from a stock of a few hundred pounds of them, orders for all needed weights can be filled, which to do with the old style solid weights would require a stock of thousands of pounds.

Three things are essential in sectional weights: first, cheapness in cost; second: the greatest weight in the shortest possible length and in the smallest possible diameter; and third: they must be readily and substan-35 tially joined together, and in a manner so as to not hang on the sides, or ever come apart, when in the window pockets. A sectional weight defective in any of these particulars is practically useless, especially as to the 40 cheapness, as no article cast in metal is sold at such a low price as the common, solid, old style sash weight. Sectional weights being of no particular advantage to the consumer, the dealer must compete in price with his 45 sectional weights with the price of the old style, solid, weights or he cannot sell them. They must therefore be ready for use direct

from the mold, without additional expense. Window pockets, in which the weights work 50 are usually small and short and to get a weight into them which will work freely and not strike the bottom, of sufficient weight to bal- I manner.

ance the sash, and of the cheapest possible material and construction, requires, as I have already stated, a weight of smallest possible 55 diameter in the shortest possible length. A sectional weight must, therefore, be solid and closely coupled, in a simple, substantial and inexpensive way.

Sectional weights cored, that is cast with a 60 hole through them, as has been the usual way, in order to connect them by passing a rope or a rod through them, adds cost and inconvenience in making the eastings and in connecting the sections, and requires a longer 65 weight for a given number of pounds and diameter.

With these objects in view my invention consists in a sash weight having a pintle or knuckle integral with one end and an eye or 70 opening in its opposite end, the pintle or knuckle being constructed to pass through the eye or opening of a second similarly formed weight, and interlock therewith against accidental displacement or separa- 75

A, represents the weights in all of the figures, cast solid, and each formed at one end with a pintle or knuckle A' and at the opposite end with an eye or opening A<sup>2</sup>. In Fig. 80 1, this pintle or knuckle A' is formed as a round hook and the eye A2 at its opposite end is reduced in diameter as shown at  $a^2$  to pass through the hook opening a' of a second weight, when the second weight is held at 85about right angles to the first as shown in dotted lines in Fig. 2. The second weight may now be turned down to pass its hook through the eye of the first weight whereupon the two weights will be securely coupled and held against accidental displacement or separation, owing to the fact that the hook opening a' is too small to permit the exit of the eye  $A^2$  when the two weights are longitudinally aligned.

In Fig. 2, which shows the second form of my improved weight A, the pintle or knuckle A' instead of being a round hook as in Fig. 1, projects at an angle to the rabbeted face of that end of the weight but the opening a' 100 and the cutaway or reduced portion  $a^2$  of the eye A2 preserves the same relative size and the parts interlock in substantially the same

In the third form of my device, the pintle or knuckle A' projects at right angles to the rabbeted face of one end of the weight while the oppositely rabbeted end of the weight 5 has an oblong eye or opening A<sup>2</sup>. The end of the pintle or knuckle A' in this form of the device is provided with a cross piece or head adapted to pass through the oblong eye or opening of a second weight when the weight is held at such an angle as to bring the two into register; the said cross piece or head crossing the said opening or eye when the two weights are in longitudinal alignment. One corner of each rabbeted end is rounded

15 to permit the ready turning of the weights to permit coupling and uncoupling. In each form of my weight all of the weights

in said form are cast in a single piece and may be used just as taken from the mold, and 20 owing to their simplicity of construction all may be molded from "match plates" which is the quickest and cheapest way, known to foundrymen to mold castings.

My sectional weights can be produced just as cheap as the old style single weights, and a sectional weight of a given length and diameter, will weigh almost the same as a solid non-sectional weight of the same length and diameter owing to the fact that the openings

and rabbets on one weight are snugly filled 30 by the projections and rabbets on the other.

I employ no bolts, rivets, knotted cords or other independent devices for connecting my weights.

Having thus described my invention, what 35 I claim, and desire to secure by Letters Pat-

ent of the United States, is—

1. A sash weight formed at one end with an eye having a reduced or flattened portion and at its other end with a hook-like pintle or 40 knuckle constructed to pass through and interlock with the eye of a similarly formed weight when the two are held at an angle one to the other to bring the said reduced or flattened portion into register with the hook 45 opening, substantially as herein described.

2. As an improved article of manufacture, a sash weight provided near one end with an opening formed transversely through it, and at its other end with a laterally projected 50 hook like portion arranged to be extended through the transverse opening of and detachably interlock with an adjoining weight, substantially as shown and described.

GEORGE S. SERGEANT.

Witnesses:

J. WATKINS,

C. F. CLINE.