No. 771,678. PATENTED OCT. 4, 1904.

T. STEVENTON.

SHEAR GAGE.

APPLICATION FILED MAR. 8, 1904.

NO MODEL.

Fig. 1.

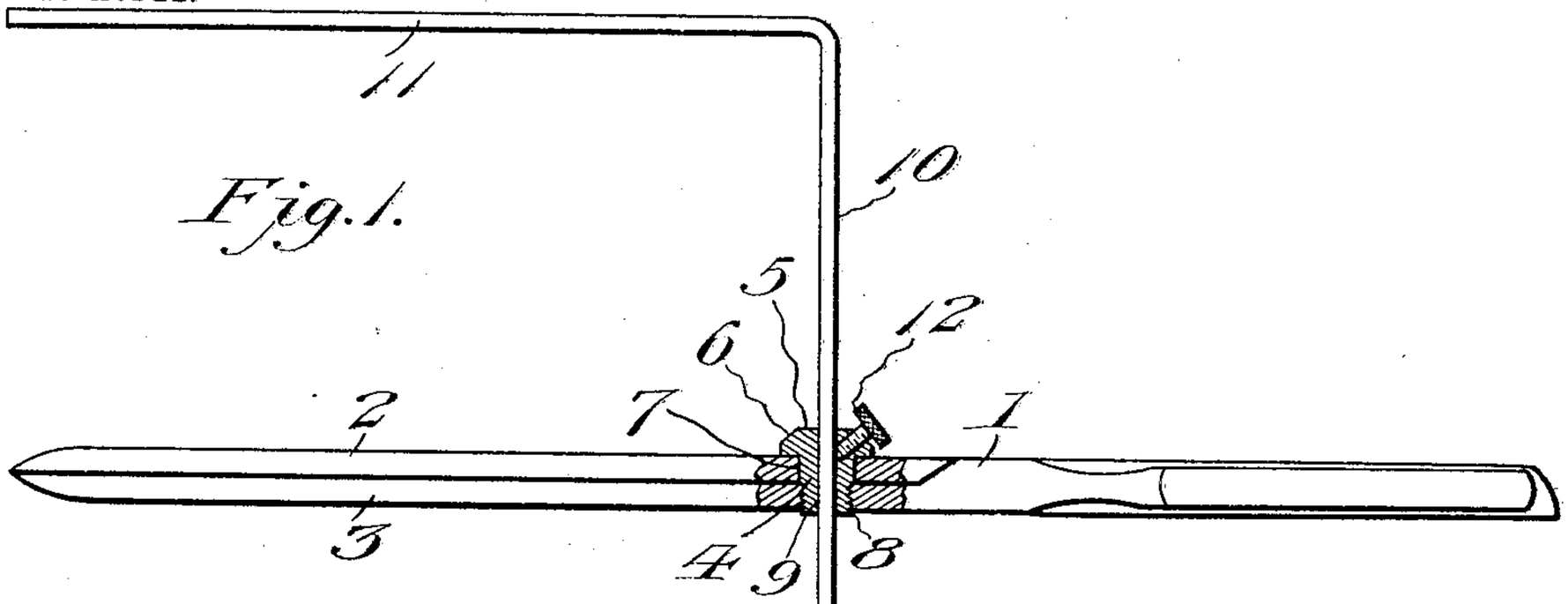

Fig. 2.

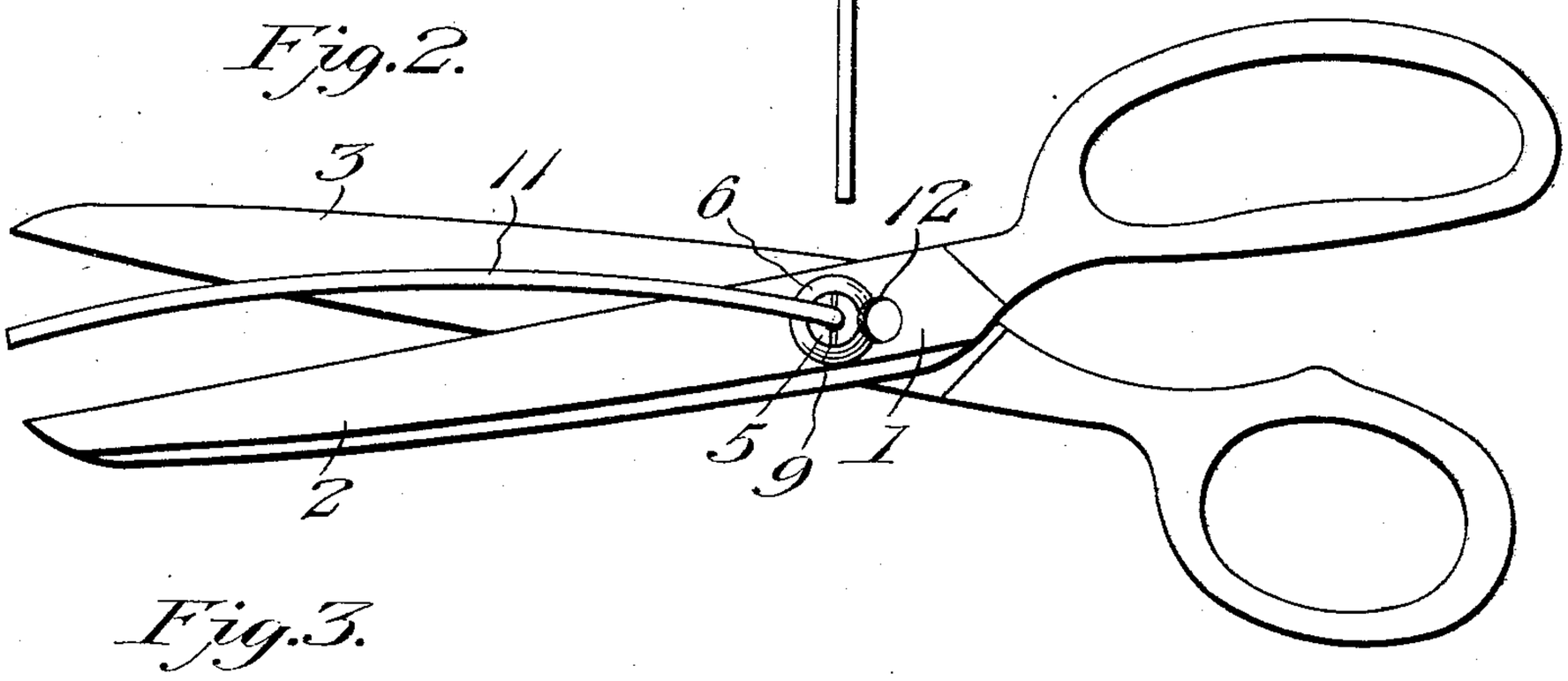

Fig. 3.

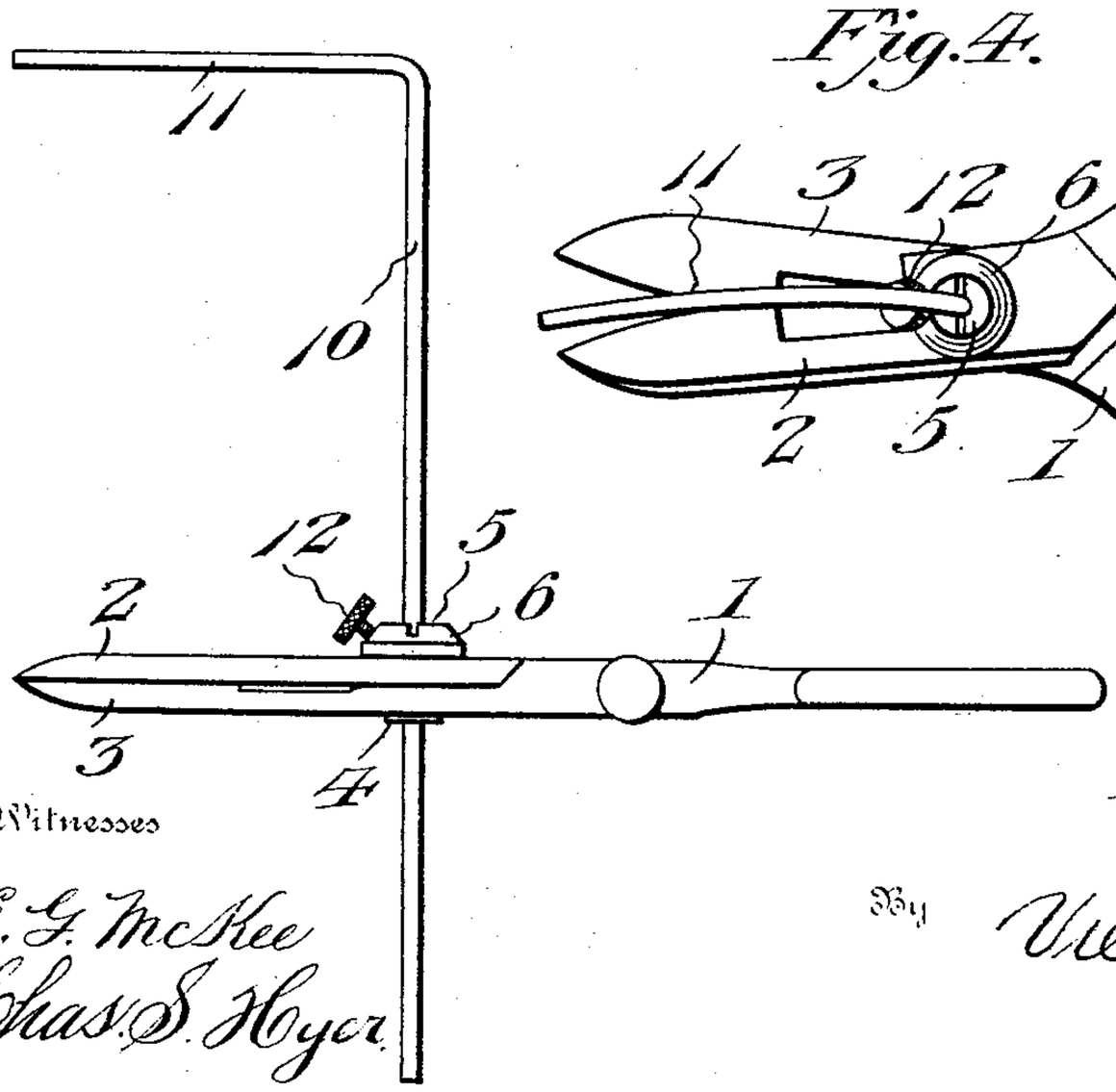

Fig. 4.

Witnesses

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No. 771,678. Patented October 4, 1904.

UNITED STATES PATENT OFFICE.

THOMAS STEVENTON, OF NESQUEHONING, PENNSYLVANIA.

SHEAR-GAGE.

SPECIFICATION forming part of Letters Patent No. 771,678, dated October 4, 1904.

Application filed March 8, 1904. Serial No. 197,109. (No model.)

To all whom it may concern:

Be it known that I, THOMAS STEVENTON, a citizen of the United States, residing at Nesquehoning, in the county of Carbon and State of Pennsylvania, have invented new and useful Improvements in Shear-Gages, of which the following is a specification.

This invention relates to a gage attachment for shears and the like; and the object of the same is to provide means for expediting measuring and marking goods to be cut in small strips and also for regularly determining equal distances between buttonholes, and, further, to facilitate the laying out of a square or part of a square without requiring an intricate measurement or operation to arrive at this result.

A further object of the invention is to provide a simple and effective organization of elements for adjustably holding the gage in connection with the shears, the several parts being so disposed that a positive securement of the gage will result by a simple manipulation.

With these and other objects and advantages in view the invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter set forth.

In the drawings, Figure 1 is a top plan view of a pair of shears, showing the improved gage attachment applied thereto and illustrated partially in section. Fig. 2 is a side elevation of the shears shown open and having the attachment applied thereto. Fig. 3 is a top plan view of a pair of buttonhole shears or scissors, showing the attachment applied thereto. Fig. 4 is a side elevation of buttonhole scissors or shears with the attachment in connection therewith.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to Figs. 1 and 2, the numeral 1 designates a pair of shears having blades 2 and 3 and other features of construction usually found in devices of this class. The fulcrum or connecting device for the blades 2 and 3 consists of a shank 4, having at one end a head 5 with a beveled rim 6. The shank 4 adjacent to the head 5 is enlarged in diameter and formed with a smooth outer surface, as at 7, to pass through the opening in the blade 2, and the reduced part of the shank, which engages the opening in the blade 3, is externally screw-threaded, as at 8, to thus lock or secure the fulcrum means for the blades to one of the latter and permit the other to freely move thereon without liability of loosening said means. Through the center of the shank 4 and head 5 a bore 9 is formed, and therein is slidingly mounted the stem member 10 of the gage, said member being disposed at a right angle to a guide-arm 11 continuing therefrom. The gage, including the member 10 and arm 11, is constructed from a single piece of wire of suitable diameter, and the arm 11 is longitudinally bowed, as clearly shown by Fig. 2, to render the said arm effective as a guide. The stem member 10 is held in its adjusted position in the fulcrum or connecting means for the blades 2 and 3 by a set-screw 12, having a milled head and extending inwardly through the beveled rim 6 of the head 5 at an angle of inclination. This set-screw 12 is readily operative to secure the stem member 10, and the angular or oblique position thereof will bring a part of the edge of the shank at an angle to the stem member 10, and thereby more effectively hold the said stem member against movement. Moreover, by the arrangement of the fulcrum-screw or connecting means as set forth the blades of the shears are left free at their outer portions or do not have cumbersome projecting clamps or other small parts liable to get out of order. When the fulcrum-screw is applied to the blades, the means for holding the gage are completely positioned at one operation. Furthermore, the cost of the attachment is reduced to a minimum by utilizing the connecting-screw for the blades, with an addition of a set-screw, as the sole means of holding the gage in adjustable relation to said blades.

As shown by Figs. 3 and 4, the gage attachment is adapted to be used in connection with buttonhole scissors or shears of the usual construction, and all the parts of the attachment are similar to those heretofore de-

scribed and have like reference-numerals applied thereto. The arm 11 in the gage which is applied to the buttonhole-shears is shortened to correspond with the length of the shears, and in all applications the said arm will be made of a length equal to the distance between the connecting-screw or fulcrum means for the blades and the free ends of the latter.

The improved device will be found exceptionally convenient in use, and in cutting strips the gage is set the desired width and so that the arm 11 may be disposed upon the edge of the goods and facilitate the cutting of either straight or bias strips without requiring the use of markers and the delay incident thereto. The gage may also be used in cutting squares or right-angular edges, and at times it may be desired to graduate the stem member and the arm. This graduation is an obvious addition and well known in the art. When the gage is used with buttonhole scissors or shears, the gage is placed on the first hole to be cut, and the blades at the distance from the arm 11 will be operated to cut a second hole, and so on until the series of buttonholes to be formed is completed.

It will be understood that changes in the proportions, dimensions, and minor details may be resorted to without departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

The combination with a pair of shears, of a fulcrum-screw extending through and pivotally connecting the shear-blades and formed with an axial bore, said screw having a head at one end to overlie and guide one of the shear-blades in movement, a gage having a stem slidable through the bore of the screw, and a set-screw passing through the head of the screw and engaging the gage-stem, said head having a beveled rim to receive and permit operation of the set-screw.

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

THOMAS STEVENTON.

Witnesses:

W. R. WATKINS,

ELIZA JAMES.