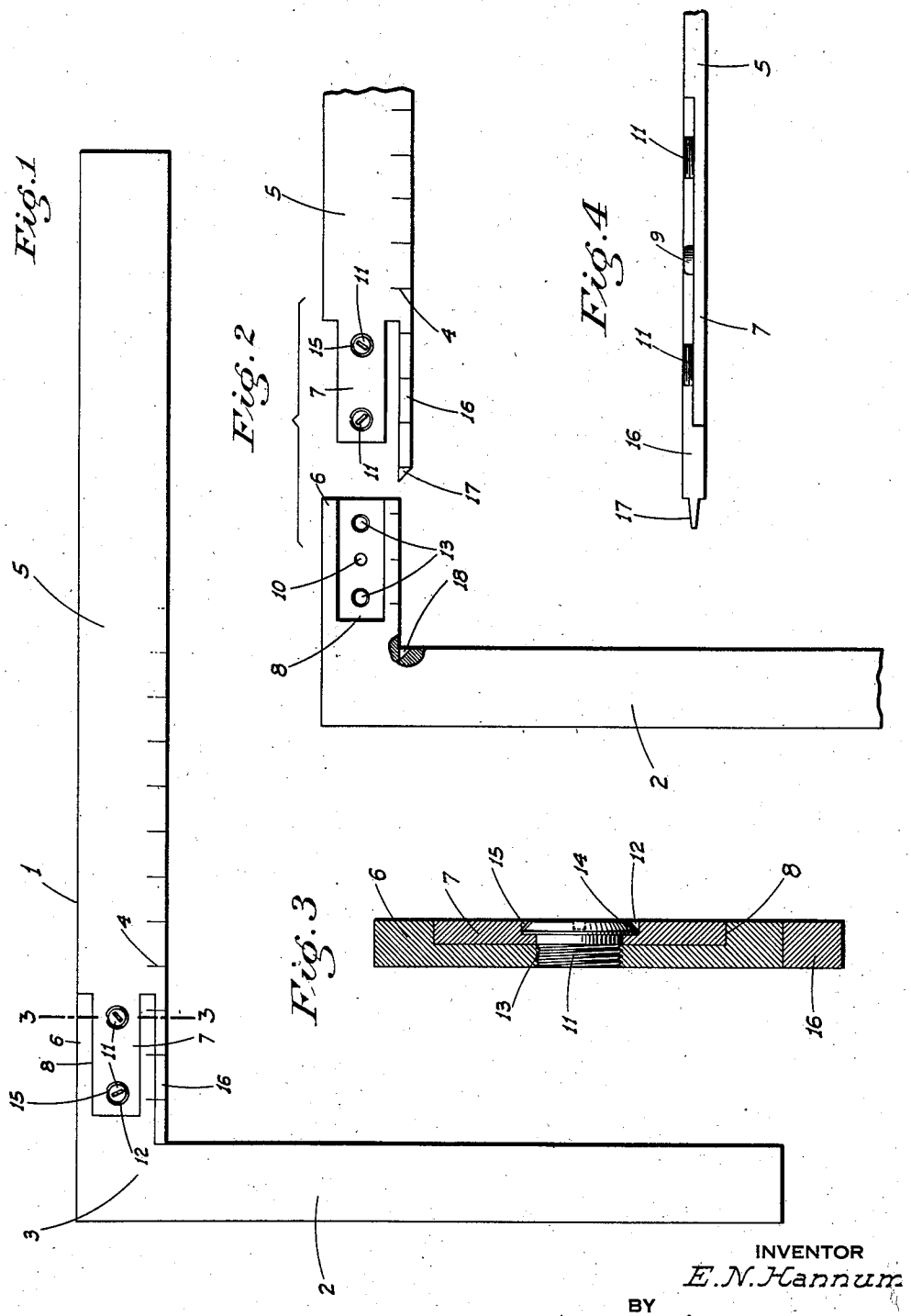
Oct. 27, 1942. E. N. HANNUM 2,300,219

KNOCK-DOWN CARPENTER SQUARE

Filed Oct. 31, 1941




INVENTOR
E. N. Hannum
BY
ATTYS

Patented Oct. 27, 1942 2,300,219

# UNITED STATES PATENT OFFICE

2,300,219

## KNOCKDOWN CARPENTER SQUARE

Elmer N. Hannum, Sacramento, Calif.

Application October 31, 1941, Serial No. 417,287

2 Claims. (Cl. 33—114)

This invention relates in general to an improved carpenter's rafter square, and in particular is directed to a rafter square of the knockdown type. Rafter squares of the knockdown type which are now available include a blade and a tongue mounted in separable relation at adjacent ends and as a result when separated neither part has any utility.

It is the principal object of the instant invention to provide a rafter square of the knockdown type which comprises a blade and a tongue integrally connected at adjacent ends; the blade being sectional and the portion of the blade which remains with the tongue being of predetermined relatively short length so that the tongue and remaining section of the blade are usable as a square under certain circumstances, as will hereinafter appear.

A further object of the invention is to provide a rafter square which includes a blade and a tongue integrally connected at adjacent ends, the blade being sectional and including a unique means connecting said sections.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawing similar characters of reference indicate corresponding parts in the several views:

Figure 1 is a plan view of the improved rafter square with the blade sections connected.

Figure 2 is a fragmentary plan view partly broken away showing the sections of the blade separated.

Figure 3 is an enlarged cross section on line 3—3 of Fig. 1.

Figure 4 is a fragmentary edge elevation of the separable section of the blade.

Referring now more particularly to the characters of reference on the drawing, my improved rafter square comprises, as is usual, a relatively long blade 1 and a somewhat shorter tongue 2 connected integrally at adjacent ends as at 3. The blade is provided as is usual with graduations 4 on the face thereof.

The blade 1 of the square is sectional and includes a relatively long section 5 and a relatively short section 6 which remains integral with the tongue 2, the sections 5 and 6 being detachably connected together at adjacent ends by means which will hereinafter be described in detail.

It will be seen that when the blade section 5 is detached from the remainder of the square the blade section 6 projects as a usual blade portion from tongue 2. The length of section 6 is predetermined; that is, it is somewhat shorter than the face width of a conventional stud or of a pair of plates, whereby when blade section 5 is detached or removed the remainder of the device can be successfully used for work on studding and the like which has already been erected and has sheeting etc. applied thereagainst, and for which work the full-length blade is not suited. Also the device with the blade section 6 will be found convenient for many other uses.

The means detachably connecting blade sections 5 and 6 comprises the following:

The blade section 5 at the end adjacent blade section 6 is formed with a centrally projecting tongue or finger 7 which is rectangular in plan, flat, and of half thickness relative to the thickness of the blade 5. This finger 7 normally seats in a half depth groove 8 symmetrical in plan to finger 7, and formed in blade section 6. A locating dowel 9 projects substantially centrally from the inner face of finger 7 and seats in a corresponding socket 10 in blade 6 at the bottom of groove 8. A pair of relatively short large diameter headed machine screws 11 are carried in longitudinally spaced holes 12 in the finger 7 and normally thread into tapped holes 13 in blade section 6 at the bottom of groove 8; the machine screws being substantially flush at both ends with corresponding surfaces of the square.

The heads of the machine screws are recessed into the finger 7, and to permanently retain the screws in finger 7, the screw heads are here shown as being beveled or chamfered, as at 14, the finger about the screw head recesses being headed over at certain points as at 15 to an extent to prevent escape of the machine screws from the fingers 7 but without limiting rotation of such screws. By reason of this heading over the machine screws remain inseparable from the blade section 5 and thus are not subject to loss when the square is knocked down.

In order to provide a continuous and unbroken working edge for the entire blade when the sections are connected, a relatively narrow parallel-edged and full-width extension 16 projects from blade section 5 along the inner edge of blade section 6, the free end of said extension abutting the tongue 2 and having a projecting beveled end 17 which seats in a socket 18 in the adjacent

edge of said tongue 2. The blade section 6 is of reduced width laterally in the direction of extension 16 in order to matchingly engage said extension when the blade sections 5 and 6 are connected. As is obvious, the above described square can be knocked down merely by unloosening machine screws 11 from blade section 6, whereupon the blade sections 5 and 6 can be drawn apart.

The projecting end 17 is tapered transversely so as to have a loose initial fit in its socket.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. In a rafter square which includes a blade and a tongue; the blade being sectional and the sections normally being disposed in end to end engagement, a finger projecting centrally longitudinally from the end of one section, the other section having a groove in which said finger symmetrically seats, means detachably securing the finger in said groove, an extension formed on said one section in parallel but spaced relation to said finger, the extension having its outer edge flush with the working edge of said one section, and the extension normally engaging the corresponding edge of the other section from end to end.

2. A square as in claim 1, with a tapered projection on the outer end of the extension, the tongue having a socket in which said projection removably fits.

ELMER N. HANNUM.