March 21, 1944. J. A. PHILLIPS 2,344,724

TRI-SQUARE ATTACHMENT

Filed Nov. 24, 1942

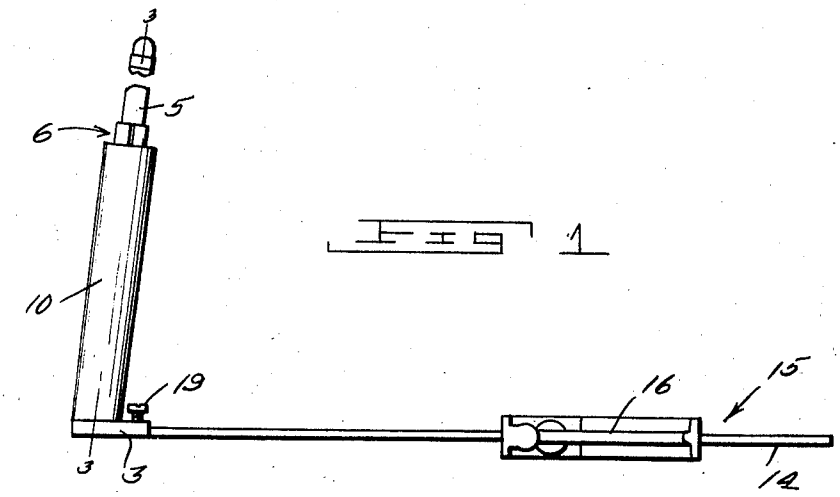



Fig 1

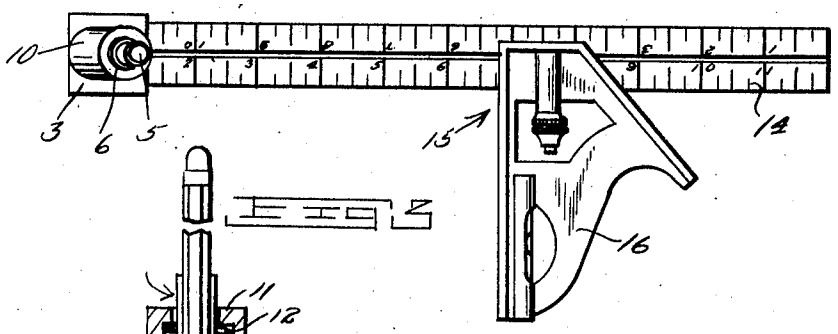



Fig 2

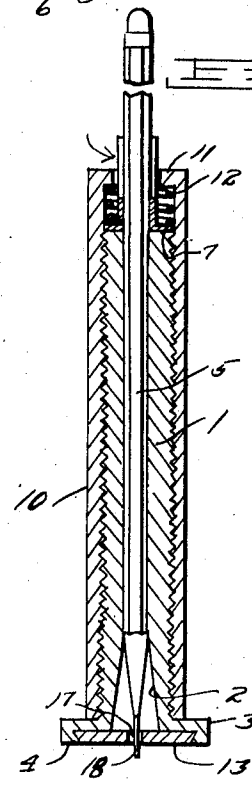



Fig 3

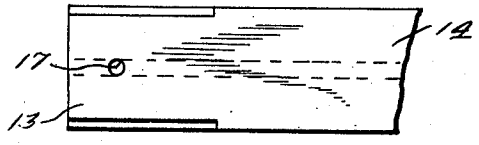



Fig 4




Fig 5

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# UNITED STATES PATENT OFFICE

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## TRY-SQUARE ATTACHMENT

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Application November 24, 1942, Serial No. 466,758

4 Claims. (Cl. 33—42)

The present invention relates generally to new and useful improvements in try squares, and has for its primary object to provide, in a manner as hereinafter set forth, an attachment for an instrument of this character comprising a novel construction and arrangement whereby true lines may be expeditiously made on material having a rough or irregular surface.

Other objects of the invention are to provide an attachment of the aforementioned character which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, light in weight, and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in side elevation, showing an attachment constructed in accordance with the present invention mounted on a try square.

Figure 2 is a top plan view thereof.

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 1.

Figure 4 is a bottom plan view of the end portion of the try-square blade on which the attachment is mounted.

Figure 5 is a detail view in top plan of the pencil gripper.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises an externally threaded, tubular post 1 of suitable material. The bore of the tubular post 1 includes a substantially conical lower portion 2. The post 1 includes, on its lower end, a base 3, the lower face or bottom of which has formed therein a dovetail groove 4.

The tubular post 1 accommodates a vertically slidable pencil 5. It will be observed that the pencil 5 projects above the post 1.

Mounted on the upper portion of the pencil 5 and frictionally gripping said pencil is a tube 6. The tube 6, includes, on its lower end, an external flange 7 which is adapted to rest on the upper end of the post 1. The upper portion of the tube 6 is vertically split, as at 8, in a manner to provide resilient segments or fingers 9 which frictionally grip the pencil 5.

A sleeve 10 is threadedly mounted on the post 1. The sleeve 10 extends above the post 1 and terminates, at its upper end in an internal flange 11 which encircles the tube 6. The coil spring 12 encircles the tube 6 and has one end engaged with the flange 11 and its other end engaged with the flange 7 for yieldingly urging the pencil 5 downwardly.

The groove 4 in the base 3 is for the reception of a dovetail tongue 13 which projects longitudinally from one end of the graduated blade 14 of a try square which is designated generally by reference numeral 15. The try square 15 includes a conventional head 16 which is slidable on the blade 14. The portion 13 of the blade 14 has formed therein an opening 17 which is aligned with the bore of the post 1 and which accommodates the point 18 of the pencil 5. A set screw 19 removably secures the base 3 on the blade 14.

It is thought that the manner in which the device functions will be readily apparent from a consideration of the foregoing. Briefly, when the instrument is placed on the material, the pressure forces the pencil 5 upwardly against the tension of the coil spring 12. It will thus be seen that the pencil 5 is floatingly mounted in the tubular post 1. As the instrument is moved over the material, the pencil 5 moves upwardly and downwardly in the post 1, following any irregularities, et cetera, in the material being marked.

It is believed that the many advantages of a try-square attachment constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A marking instrument of the character described comprising a tubular post, means for mounting said post on the blade of a try square, a pencil slidably mounted in the post, a sleeve threadedly mounted on said post, a member mounted on the pencil within the sleeve, and resilient means in the sleeve engaged with said member for yieldingly resisting upward movement of the pencil.

2. A marking instrument of the character described comprising a tubular post, means for mounting said post on the blade of a try square, a pencil slidably mounted in the post, a tube mounted on said pencil above the post, said tube including an external flange on its lower end, said tube further including a plurality of resilient fingers engaged under tension with the pencil

for frictionally securing the tube thereon, a sleeve threadedly mounted on the post and extending above said post, an internal flange on the upper end of the sleeve, and a coil spring encircling the tube and having one end engaged with the first-named flange and its other end engaged with the second-named flange for yieldingly urging the pencil downwardly in the post.

3. A marking instrument of the character described comprising a try square including a graduated blade, a dovetail tongue extending longitudinally from one end of the blade, a tubular, externally threaded post, a base on one end of the post having a dovetail groove therein for the reception of the tongue, said tongue having an opening therein aligned with the bore of the post, means for removably securing the base on the tongue, a pencil slidably mounted in the post, the point of said pencil being operable in the opening in the tongue, and means for yieldingly urging the pencil downwardly in the post.

4. A marking instrument of the character described comprising a try square including a graduated blade, a dovetail tongue extending longitudinally from one end of the blade, a tubular, externally threaded post, a base on one end of the post having a dovetail groove therein for the reception of the tongue, said tongue having an opening therein aligned with the bore of the post, means for removably securing the base on the tongue, a pencil slidably mounted in the post, the point of said pencil being operable in the opening in the tongue, and means for yieldingly urging the pencil downwardly in the post, the last-named means including a member frictionally secured on the pencil above the post, a sleeve threadedly mounted on the post and extending above said post, an internal flange on the upper end of the sleeve, and a coil spring in the sleeve engaged beneath said flange and with the member.

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