March 5, 1935. H. E. CATHCARD 1,993,132

SCRIBER

Filed Jan. 2, 1934

Fig. 1

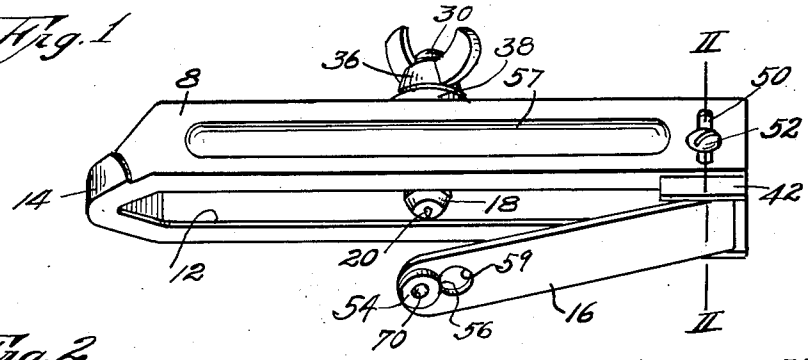
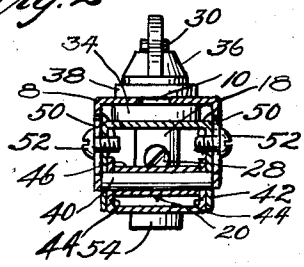


Fig. 2



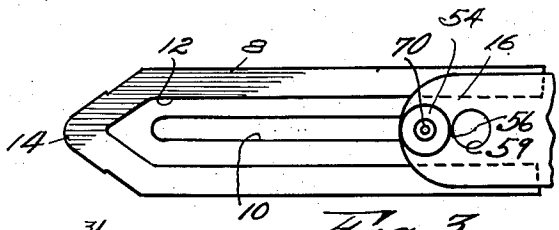


Fig. 3

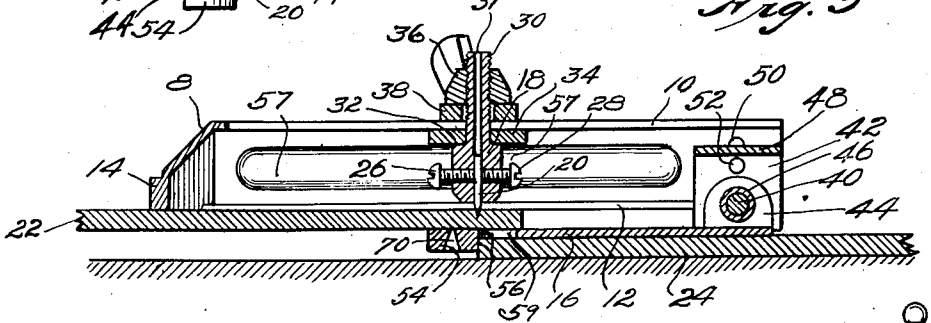


Fig. 4

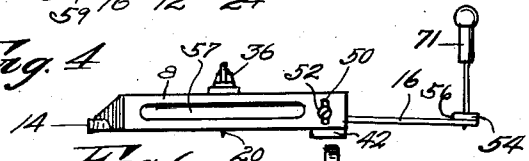
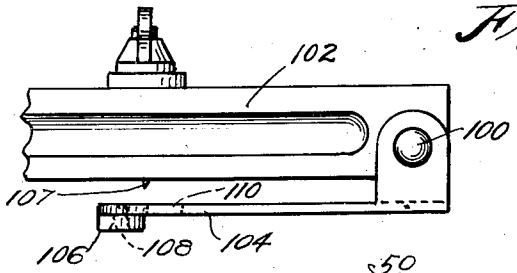


Fig. 6

Fig. 7



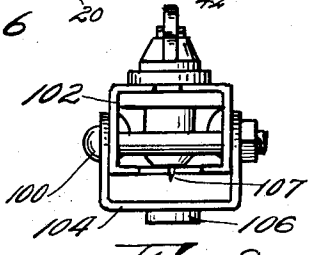


Fig. 8

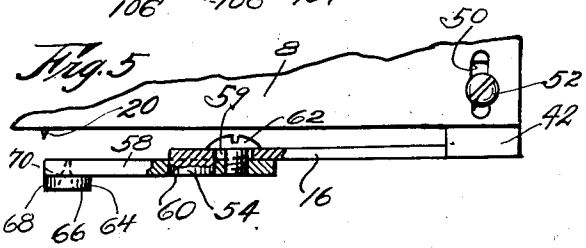


Fig. 5

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SCRIBER

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Application January 2, 1934, Serial No. 704,922

8 Claims. (Cl. 33—42)

This invention relates to scribing tools adaptable for use in marking floor covering such as linoleum or similar material, and the primary object is to provide a scriber having structural features which contribute toward making an instrument that is adaptable to many uses and particularly efficient as regards its use with floor covering of various thickness.

One of the primary aims of the invention is to provide a scriber of the character mentioned, which includes an adjustable marking pin, as well as an adjustable hinge connection between body and arm of the device, all of which allows the scriber to be used with or without the arm serving as a guide for the path of travel of the marking pin.

A yet further object of the invention is the provision of a scriber of the type hereinafter described, having as a part thereof, means for forming arcs or complete circles, merely by manipulation of the parts of the scriber and with the employment of a centering instrument or the like.

Another aim of the invention is to provide novel extension means for the scriber arm which may be used under certain circumstances, and which may be added to the scriber assembly without loss of time and through the medium of but a single screw that is quickly moved into place.

An even further object of the invention is to provide a scriber that is exceptionally rugged in construction, is economical to manufacture, yet embodies definements which renders its use highly practical and desirable.

With these objects in view, the two forms of the scriber illustrated in the drawing will be described in detail.

In the drawing:

Figure 1 is a perspective view of a scriber embodying this invention.

Fig. 2 is a vertical cross section through the same, taken on line II—II of Fig. 1.

Fig. 3 is a fragmentary, inverted plan view of the scriber showing relation between shoulder and marking pin.

Fig. 4 is a vertical, longitudinal section through the scriber, showing it in the operative position with a floor covering.

Fig. 5 is a fragmentary side elevation of a portion of the scriber shown in Fig. 1, but with the extension in place.

Fig. 6 is a side elevation, on reduced scale, of the scriber showing its use as a compass.

Fig. 7 is a fragmentary side elevation of a scriber embodying a modified form of the invention, and,

Fig. 8 is an end view of the same.

One of the serious short-comings of scribers of the general character shown in the accompanying drawing is the variation in relation between marking pin and shoulder as floor coverings of various thicknesses are encountered by the workmen. Under perfect conditions, the body and arm of the scriber should be parallel when the floor covering is projected between these members for the purpose of placing thereon a "cut-off" mark. The improvements contemplated by this invention are effective in overcoming any objetcion in this regard.

Referring now to Figs. 1 to 4 inclusive, which illustrates the preferred form of scriber embodying this invention, the numeral 8 indicates a hollow body formed of metal or other suitable substance and having in each of two opposed, longitudinal sides thereof, slots 10 and 12, respectively. One end of hollow body 8 has a nose 14 formed thereon to engage a wall or similar vertical abutment when floor covering is to be cut off parallel to such abutment and also when arm 16 is swung back beyond the opposite end of body 8 and above the lower side thereof having slot 12 formed therein.

A chuck 18 carries a marking pin 20 so that the latter projects through longitudinal slot 12 where it can engage the surface of the floor covering piece 22, a portion of which is to be cut off so that the edges of piece 22 and piece 24 might be moved into abutting relation. Chuck 18 has set screws 26 and 28 arranged in opposed relation so that equal force might be exerted upon marking pin 20. A screw-threaded neck 30 extends upwardly from within hollow body 8 through slot 10 and because of the variation in diameter between neck 30 and the lower portion of chuck 18, there is formed a shoulder 32, upon which rests a washer 34, which bridges slot 10 and receives the clamping force exerted upon chuck 18 when thumb screw 36 is manipulated.

A similar washer 38 should be used to bear against the upper face of body 8. Thus it is to be seen that marking pin 20 may be adjusted longitudinally along body 8, and since slot 10 extends practically the full length of body 8 and particularly close to nose 14, it is obvious that the tool is usable where but a minimum amount of the floor covering is to be cut off.

Arm 16 has one end thereof hingedly joined to body 8 through a special structure which permits moving pintle 40 along a path extending laterally

from body 8. To accomplish this result, a yoke 42 is employed which carries pintle 40, which passes through the parallel, opposed legs of yoke 42 and also through the opposed, upturned ears 44, integral with arm 16. A tubular spacer 46 circumscribes pintle 40 and the distance between wall 48 of yoke 42 and pintle 40 is great enough to allow swinging arm 16 through a complete 180 degree arc.

To complete the structure which allows moving pintle 40 out and in, each of the opposed side walls of body 8 has formed therein a slot 50 which receives screws 52 that are in screw threaded engagement with the opposed legs of yoke 42. Obviously, the length of slots 50 determines the amount of movement to be imparted to yoke 42 and its related parts, but a structure such as illustrated in the drawing has been found to be in proper proportion and substantially adequate to accommodate floor coverings normally encountered. Pintle 40 interconnects yoke 42 and arm 16 at a point adjacent one end of the latter and the opposite or free end carries a projection 54 to form a vertical shoulder 56. When the scriber is in operative position, such as shown in Fig. 4, it is desired that the lower face of body 8 and arm 16 be substantiallly parallel.

A gripping assist such as longitudinal emboss 57 is formed along the two opposed longitudinal side walls of body 8. This eliminates danger of slippage during use.

Since marking pin 20 becomes hard to remove as a result of collection of material such as paste, cuttings and the like, hole 31 is provided through chuck 18 and extending to the end of neck 30 to permit forcing pin 20 from operative position when renewal or sharpening is necessary.

Obviously strips of given width might be cut when adjustment of pin toward and from the end of regular arm 16 is possible. In such case, the end of arm 16 serves as a guide.

An added novel feature of this particular scriber is the provision of extension 58 that is attached to arm 16 to permit scribing near the nose end of body 8. This extension is secured in place as illustrated in Fig. 5 and an opening 60 formed therethrough receives projection 54. A screw or analogous means 62 passing through sight opening 59 of arm 16 affords means to rigidly secure extension 58 in working position.

As in the case of arm 16, extension 58 has a shoulder 64 formed thereon by projection 66. In close "outside" scribing, face 68 and end of projection 58 serve as guide faces. It is advisable to have the end of projection 58 in alignment with pin 20 when chuck 18 is at the end of its path of travel along slot 10. The thickness of extension 58 should be the same as the thickness of projection 54 to insure a smooth surface at the point of connection. It sometimes becomes necessary to scribe arcs or circles on the floor covering, and this invention contemplates the means whereby such might be done through unique features formed as a part of the scriber shown. Pin 20 is movable along the length of body 8 and a tapered opening 70 formed through the free end of arm 16 allows the use of an awl or similar tool 71 to hold a given center as pin 20 is swung therearound. The angle of arm 16 is compensated in the taper of opening 70.

Where a scriber is constructed to receive floor coverings of a given thickness, and wherein that scriber the hinge connection between arm 16 and body 8 is fixed, it is manifestly true that when floor covering of a greater thickness is projected between body and arm 8 and 16 respectively, it will be difficult to set and maintain shoulder 56 in proper alignment with marking pin 20. As an example, assume that a floor covering thicker than that shown at 22 should now be inserted between body 8 and arm 16 without adjusting the position of pintle 40. The greater thickness of this new floor covering would force the free end of arm 16 outwardly and because of its pivotal connection at 40, shoulder 56 would be drawn slightly toward the end of the scriber supporting pintle 40. When the upper thicker piece of floor covering was marked and then cut off, there would be sufficient variation to preclude snug abutment between the edge formed by cutting off the thicker floor covering and the edge of the floor covering below arm 16 which served as a guide for shoulder 56. Without a doubt, the structural features embodied in this scriber will overcome these and other well known objections.

Figs. 7 and 8 merely illustrate a modified form of the invention and while a complete scriber is shown, there is no means in this form whereby the position of pintle 100 might be changed with respect to its relation with body 102. Arm 104 carrying a projection 106 to provide a shoulder 108 is merely hingedly joined to body 102 at a point as close to the lower edge thereof as is possible, and in this form the position of pin 107 must be gauged as the thickness of the floor covering varies. A sight opening 110 is provided in arm 104 and such opening 56 should also be provided in arm 16 of the preferred form. The use of such a sight opening facilitates in setting the tool.

When manufacturing a scriber embodying this invention, it is desired that body 8 be hollow so that both the novel hinge structure and the chuck mechanism might be fully encased, all to the end that not only does the tool make a neat appearance, but is thereby made exceptionally strong and rugged.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A scriber of the character described comprising a hollow body having a longitudinal slot formed in each of two opposite sides thereof; a marking pin mounted within said body for longitudinal and lateral adjustment; and an arm carried by said body, said arm having a hinge connection to one end of said body with the opposite end movable toward and from the said marking pin, said hinge connection being adjustable with respect to the body.

2. A scriber of the character described comprising a hollow body having a longitudinal slot formed in each of two opposite sides thereof; a marking pin mounted within said body for longitudinal and lateral adjustment; and an arm carried by said body, said arm being hingedly connected at one end to said body with the opposite end movable toward and from the said marking pin, said arm having a shoulder formed on the side remote from the said body in alignment with the said marking pin when the latter is in one position in its line of longitudinal travel along said body and a sight opening formed therethrough adjacent to the said shoulder.

3. A scriber of the character described comprising a body; a marking pin carried by the body and projecting from one side thereof; an arm hingedly carried by the body for movement toward and from the marking pin; and means establishing a hinge connection between body and

arm comprising a pintle movable along a path extending laterally from the body.

4. A scriber of the character described comprising a body; a marking pin carried by the body and projecting from one side thereof; an arm hingedly carried by the body for movement toward and from the marking pin; and means establishing a hinge connection between body and arm comprising a yoke, a pintle joining the yoke and said arm whereby to create said hinge connection and means to adjustably secure said yoke in position on the body.

5. A scriber of the character described comprising a body; a marking pin carried by the body and projecting from one side thereof; an arm hingedly carried by the body for movement toward and from the marking pin; and means establishing a hinge connection between body and arm comprising a yoke slidably mounted on the body for movement in a path extending laterally thereof, a pintle joining the yoke and said arm whereby to create said hinge connection, and means interconnecting said yoke and body to secure said yoke in a given set position.

6. A scriber adapted for use in laying floor covering comprising a body; an arm hingedly mounted on said body; a pin carried by the body for marking the floor covering projecting between said body and arm; and adjustable means at the hinge connection between the body and said arm for positioning the axis of the hinge at a point along a path extending laterally from said body whereby the said body and arm may be maintained in parallel relation as floor covering of various thicknesses are marked by being projected between the body and arm.

7. A scriber of the character described comprising a body; a marking pin carried by the body for longitudinal movement therealong and projecting from one side thereof; an arm hingedly carried by the body for movement toward and from the marking pin; a projection on the free end of the arm to form a shoulder; a sight opening formed through the arm adjacent said shoulder through which to view the pin when positioning the same in alignment with the said shoulder; and an extension removably affixed to said arm, said extension having an opening formed therethrough adjacent one end thereof to receive the projection on the said arm, a shoulder formed on the extension adjacent the other end thereof, and a screw in screwthreaded engagement with the arm and extending through the sight opening of the arm to secure said extension in place.

8. A scriber of the character described comprising a body; a marking pin carried by the body for longitudinal movement therealong; and an arm hingedly carried by the body for movement to and from a position extending longitudinally of the body, said arm having a tapered opening formed through the extended end thereof.

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