Sept. 20, 1932. L. W. LUFF 1,878,787

BOILER STAND

Filed Nov. 23, 1929

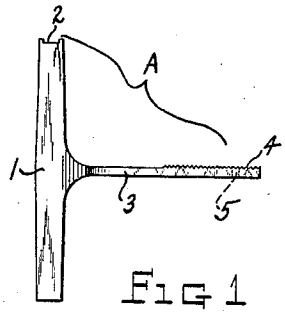


Fig 1

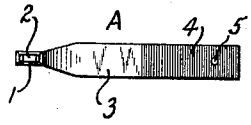


Fig 2

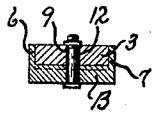


Fig 7

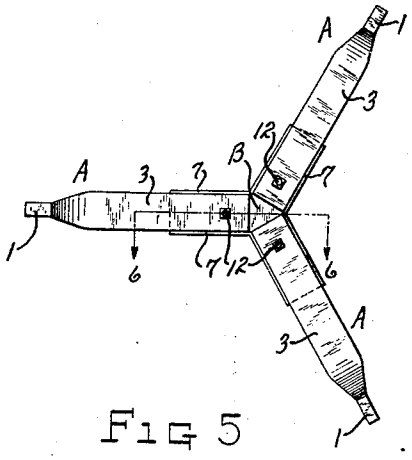


Fig 5

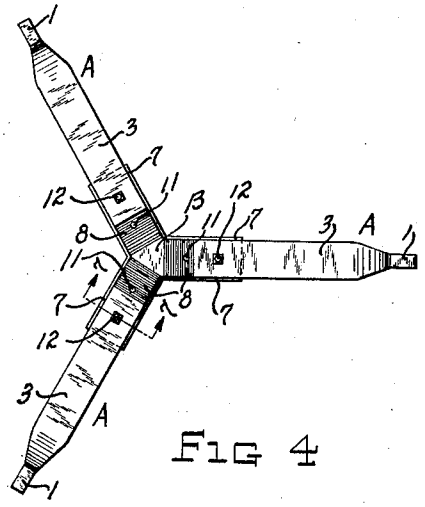


Fig 4

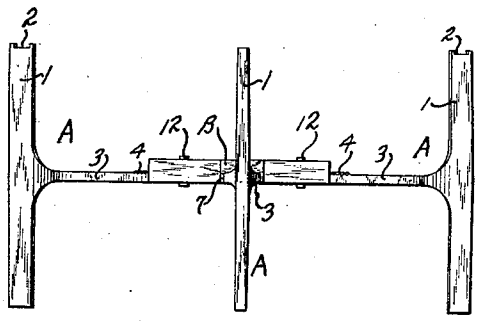


Fig 3

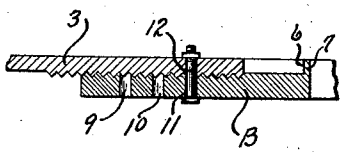


Fig 6

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BOILER STAND

Application filed November 23, 1929. Serial No. 409,304.

This invention relates to boiler stands of the type employed for supporting a domestic hot water boiler.

The objects of the present invention are to provide a novel form of such stand which may be assembled from a minimum number of principal parts most of which may be identically similar. A further object of the invention is to provide such a design of the principal parts that they may be readily and cheaply produced of cast metal.

The exact nature of the invention together with further objects and advantages thereof will be apparent from the following description taken in connection with the accompanying drawing in which Figs. 1 and 2 are elevation and plan views respectively of one of the principal parts of which a number are employed; Fig. 3 is a view in elevation of the complete assembled boiler stand; Fig. 4 is a bottom view of the assembly appearing in Fig. 3; Fig. 5 is a view corresponding to Fig. 4 but showing the parts so adjusted that the boiler stand will accommodate a smaller size of boiler; Fig. 6 is a vertical detail section as in the plane of lines 6—6, Fig. 5; and Fig. 7 is a vertical detail section as in the plane of lines 7—7, Fig. 4.

With reference now to the drawing the principal parts of which the boiler stand is assembled are a number of similar support parts A which may be identical in form, and a bracket or spider part B with which all of the support parts are connected as will appear.

Each support part A comprises a straight leg member 1 having a notch 2 at one end, and an arm member 3 preferably integral with and perpendicular to the leg member centrally thereof. The two principal members 1 and 3 of each support part are preferably thin and flat so that as indicated, Figs. 1 and 2, when the leg member is disposed generally in a vertical plane its arm member 3 will lie generally in a horizontal plane. At the free end of the arm member 3 one face, as the upper one, is provided with deformations 4 running transversely to produce the effect of corrugations. The arm member 3 also has a through opening 5 near its free end and in the zone of the corrugations 4.

It will be observed that the form of the support part A is such that a number of these parts may be readily produced in very closely adjacent relation in a mold parted in the plane of the arm 3.

The bracket part B is provided with a number of radially disposed ways 6 preferably in the form of grooves as indicated Fig. 7. These ways are each adapted to receive the free end portion of the arm 3 of one of the support parts A, to allow adjustment of the arm along the way but to maintain the angularity of the arm with the bracket part and thus with other arms in the other ways of the bracket. As indicated I prefer to employ three support parts A. Hence the bracket B is provided with three ways 6 disposed at 120° in a plane. In order to save weight and material the bracket part B is made in the spider form shown with three arms 7 corresponding with the three ways 6, each arm being of channel section as shown Fig. 7.

The bottoms of the ways 6 are provided with transverse deformations 8 corresponding with the deformations 4 as indicated Fig. 6. A number of through openings 9, 10 and 11 in the bracket B are spaced along the ways 6 thereof, and the arrangement is such that any of the openings 9, 10 and 11 may register with the opening 5 of a support part the arm 3 of which is positioned in the corresponding way 6 of the bracket part B.

Therefore a boiler stand assembly may be completed from three support parts and one bracket part, by means of three bolts 12; the bolts 12 extending through the openings 5 in the support parts and the 9, 10 and 11 set of openings in the bracket part. As indicated Figs. 3, 5 and 6, the innermost open-

ings 11 of the bracket part B are employed, so that the support parts are adjusted to innermost relative position. Obviously in this position the notches 2 of the legs 1 define a circle upon which they are disposed at 120°; so that the stand is adapted to support a boiler, receiving the lower circular edge of the boiler in the notches 2. Fig. 4 shows the outermost set of openings 9 employed to adjust the support parts A to outermost position in which the notches 2 are adapted to receive a boiler of correspondingly greater diameter. Obviously, the intermediate set of openings 10 might be similarly employed to accommodate the stand to an intermediate size of boiler.

What I claim is:

In a boiler stand of the class described, a plurality of similar support parts, each having a vertical leg member and an arm member integral therewith located in a horizontal plane, and a central bracket part, said bracket part having a plurality of radially arranged ways each adapted to receive an overlapping end portion of one of said arm members to position the corresponding support part in angularity with the other support parts about the bracket part, the ways of the bracket part having transverse horizontal serrations thereon, the arm members having transverse horizontal serrations meshed with those of the bracket part, and vertical clamp bolts in aligned perforations of the ways and arm members whereby the bolts may prevent relative rotation of the arm members and bracket part in vertical planes and the serrations may prevent relative rotation in horizontal planes and whereby the bracket part and arm members may be rigidly associated in predetermined angular and also predetermined radially spaced relation.

In testimony whereof I hereby affix my signature.

LAWRENCE W. LUFF.