

J. F. PARKER.
MUFFLER FOR MIXERS.
APPLICATION FILED DEC. 6, 1907.

924,926.

Patented June 15, 1909.

Fig. 1

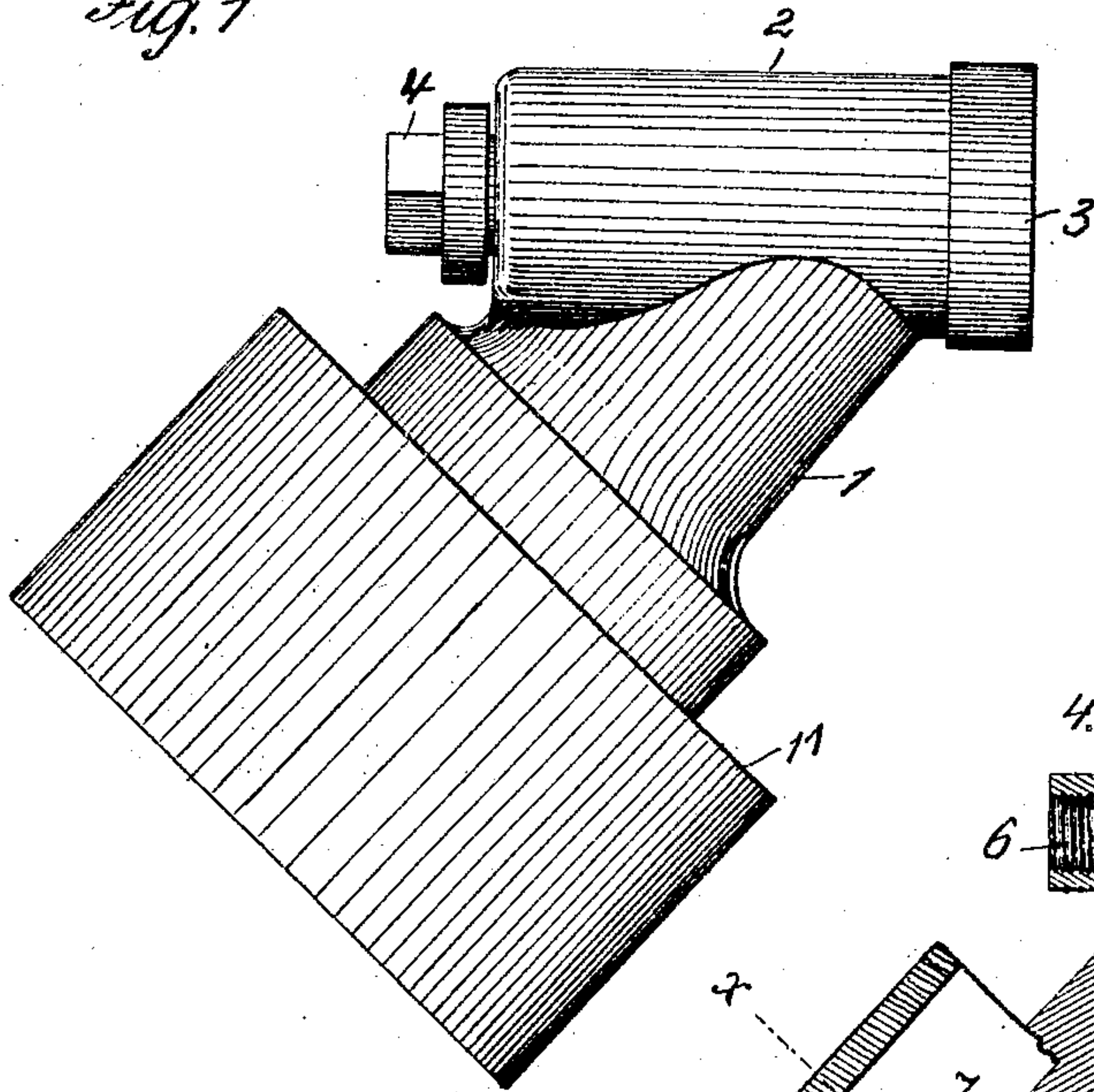


Fig. 2.

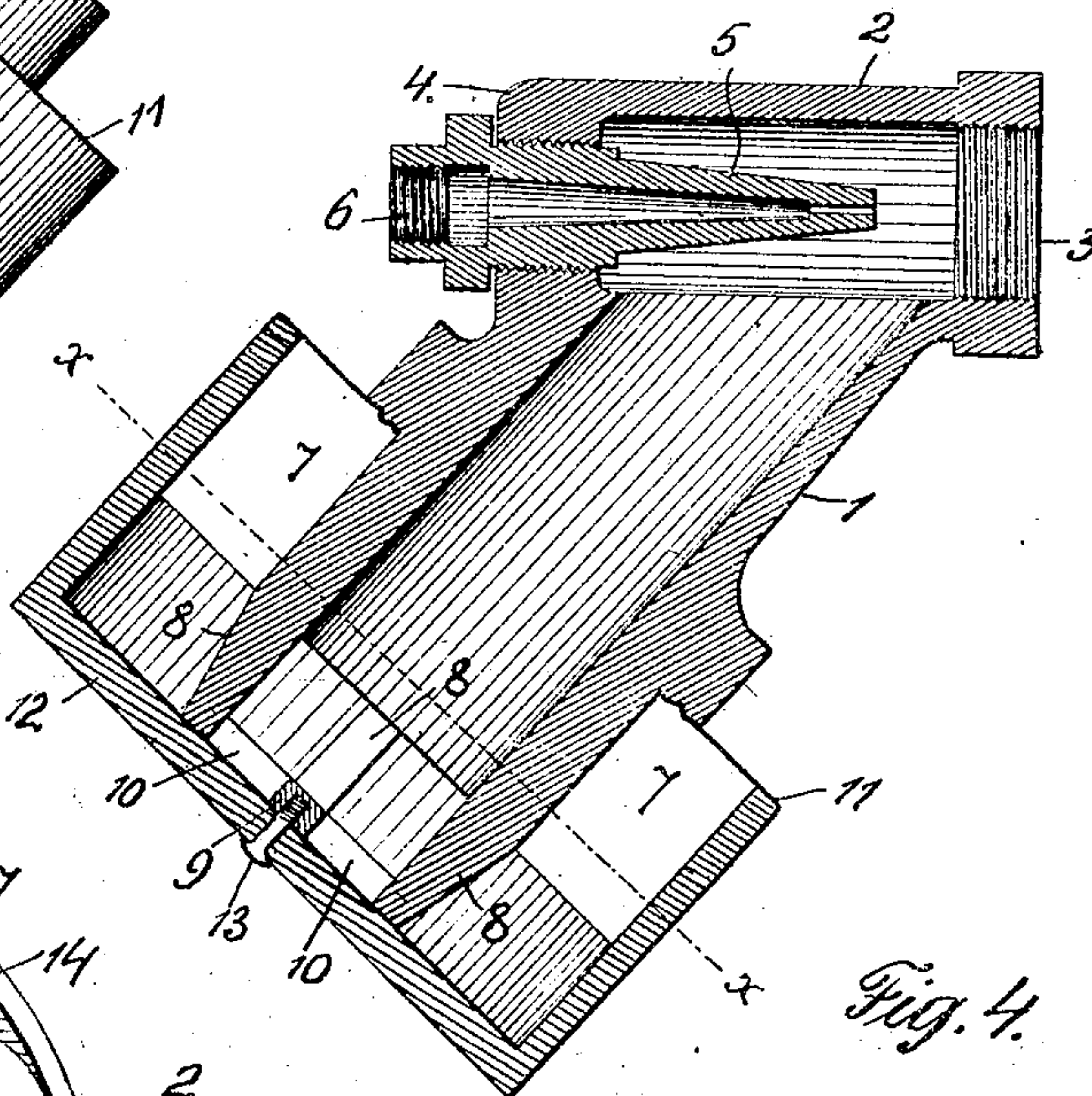


Fig. 3.

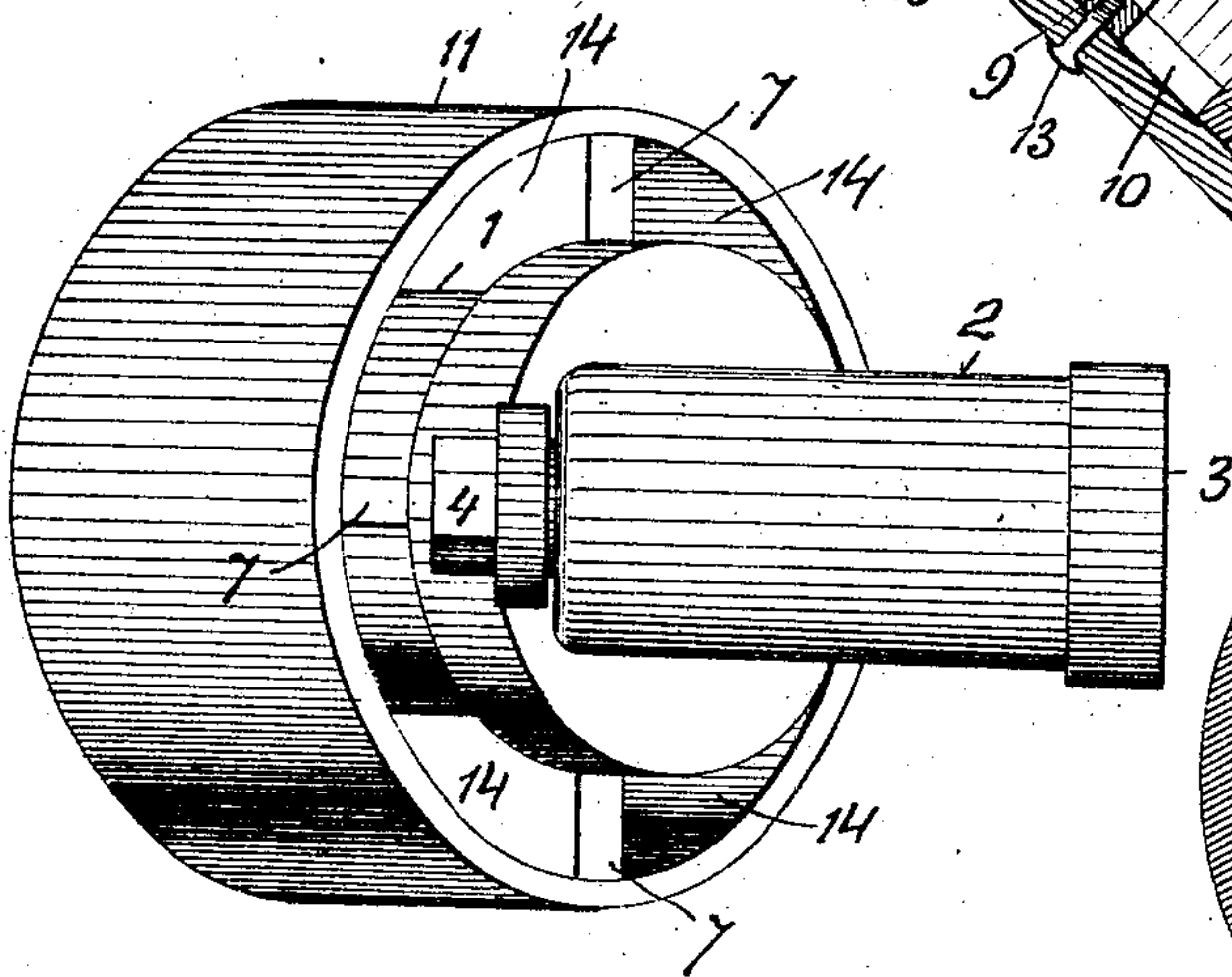
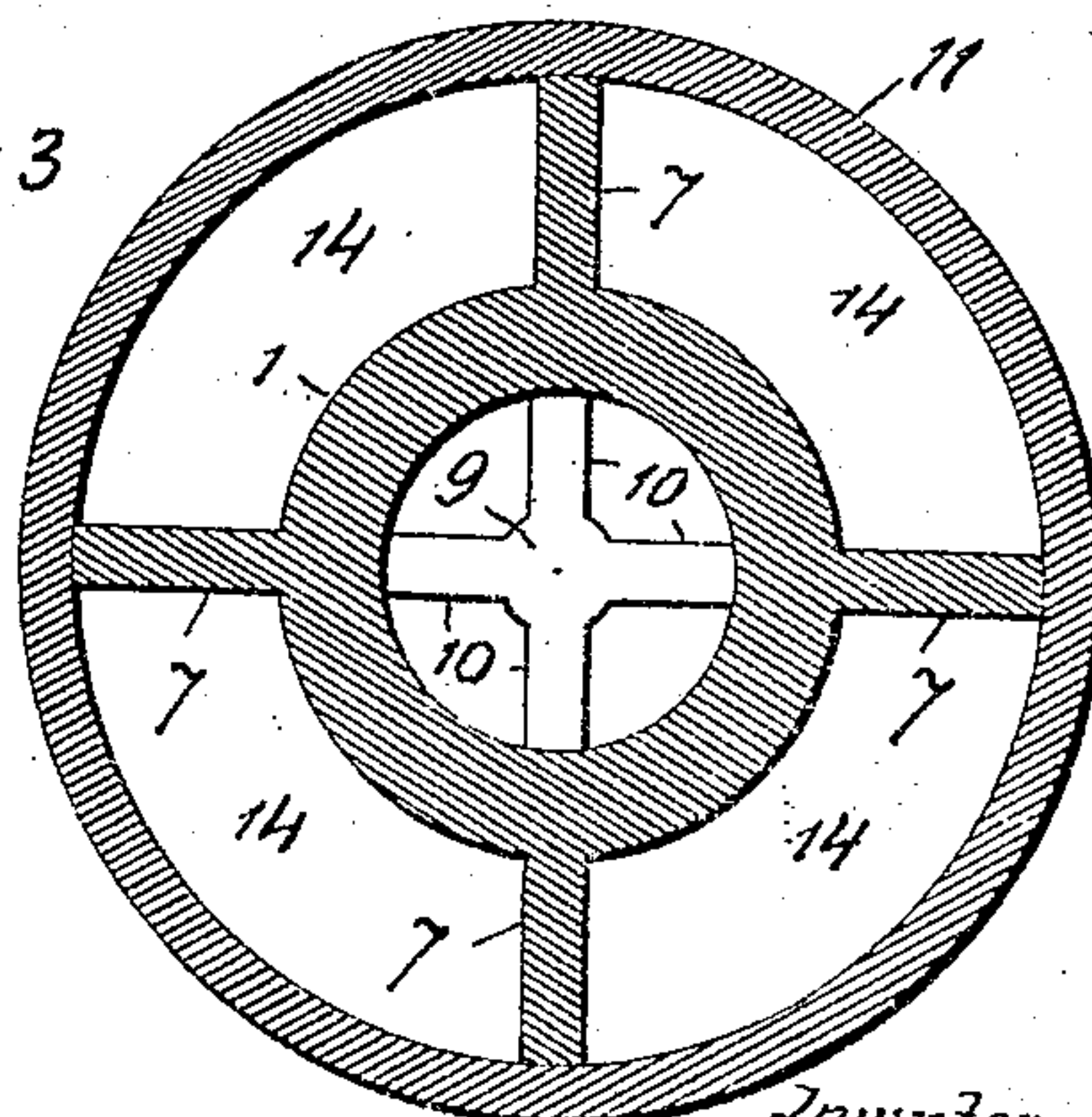


Fig. 4.



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JAMES F. PARKER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO PITTSBURG AUTOMATIC SMOKE PREVENTOR COMPANY, OF PITTSBURG, PENNSYLVANIA, A COPARTNERSHIP.

MUFFLER FOR MIXERS.

No. 924,926.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed December 6, 1907. Serial No. 405,409.

To all whom it may concern:

Be it known that I, JAMES F. PARKER, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mufflers for Mixers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to mufflers for air and gas mixers, and its primary object is, to provide novel and effective means for muffling or deadening the noise or roar created by the sudden admixture of air and gas under pressure.

A further object of the invention is, to provide novel means for securing the muffler to the air inlet pipe, which will afford an ample supply of air.

With these ends in view, the invention consists of the construction and combination of elements hereinafter fully described, and set forth in the appended claims, in connection with the accompanying drawing forming part of this specification, and in which:

Figure 1 is a side elevation of a muffler embodying the invention, Fig. 2 is a vertical section of the same, Fig. 3 is a top plan of the device, and Fig. 4 is a section on the line X—X of Fig. 2.

The reference numeral 1 designates an air inlet pipe, having cast integral therewith a gas pipe 2 disposed horizontally, and at an angle to the pipe 1, as shown.

The pipe 2 is internally threaded at one end 3 for its attachment to a conduit (not shown) for conducting the admixed air and gas to the desired point; and the opposite end 4 of said pipe 2 is internally threaded to receive an injector nozzle 5 externally threaded to fit within the threaded end of the pipe 2, and also formed with integral threads 6 for the attachment thereto of a gas supply pipe.

Projecting radially from the pipe 1 are a plurality of equidistant arms 7, and projecting from the lower end of said pipe 1 are a plurality of lugs 8 within which is a spider comprising a hub 9, and radially projecting arms 10, the outer ends of which bear against the inner surfaces of the lugs 8. Spaces formed between the lugs 8 constitute air inlets.

The improved muffler comprises a cylindrical casing 11, open at its upper end and

closed at its lower or outer end by a head 12, which is permanently secured to the spider by a rivet 13 extending centrally through the head 12, and the hub 9 of the spider. The head 12 abuts against the lugs 8 and the spaces between the lugs establish communication between the casing and the interior of the pipe 1 or in other words the said spaces as aforesaid form air inlets.

The casing 11 of the muffler fits snugly over the ends of the arms 7, leaving inlets 14 of considerable area for the admission of air to the pipe 1 between the lugs 8.

The function of the muffler is to prevent the roar or blowing noise incident to the inrush of air under pressure into the pipe 1, the force of the current of air being accelerated by the suction force of the gas entering through the injector 5.

It will be apparent that the improved muffler is not only extremely simple in construction, but the means for securing it in position provide an attachment for air and gas mixers which may be produced at a minimum of expense, and affords an effective device for the purpose in view.

Having now described my invention what I claim as new, is:—

1. In a muffler, the combination with an air inlet pipe provided with spaced lugs at its outer end to provide air inlets, and radially-arranged arms projecting from the periphery of said inlet pipe, of a casing received over said arms having an open inner end and a closed outer end abutting against the ends of the lugs, and means for securing said casing in position.

2. In a muffler, the combination with an air inlet pipe provided with spaced lugs at its outer end to provide air inlets, radially-arranged arms projecting from the periphery of said inlet pipe, and a spider within the pipe at the outer end thereof, of a casing received over said arms having an open inner end and a closed outer end abutting against said lugs, and means for securing the casing to the spider.

3. In a muffler, the combination with an air inlet pipe provided with spaced lugs at its outer end to provide air inlets and further having radially arranged arms projecting from the periphery of said inlet pipe, of a casing received over said arms having an open inner end and a closed outer end abut-

ting against said lugs, and means for securing the casing fixedly in position over the outer end of said inlet pipe.

4. The combination with an air and gas
5 mixer, including an air-inlet pipe provided with projecting lugs to provide air inlets of arms projecting radially from said air pipe, a spider supported by said lugs, and a
10 muffler comprising a cylindrical casing having an open inner end received over said

arms and having a closure head secured to said spider, said head abutting against said lugs.

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

JAMES F. PARKER.

Witnesses:

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