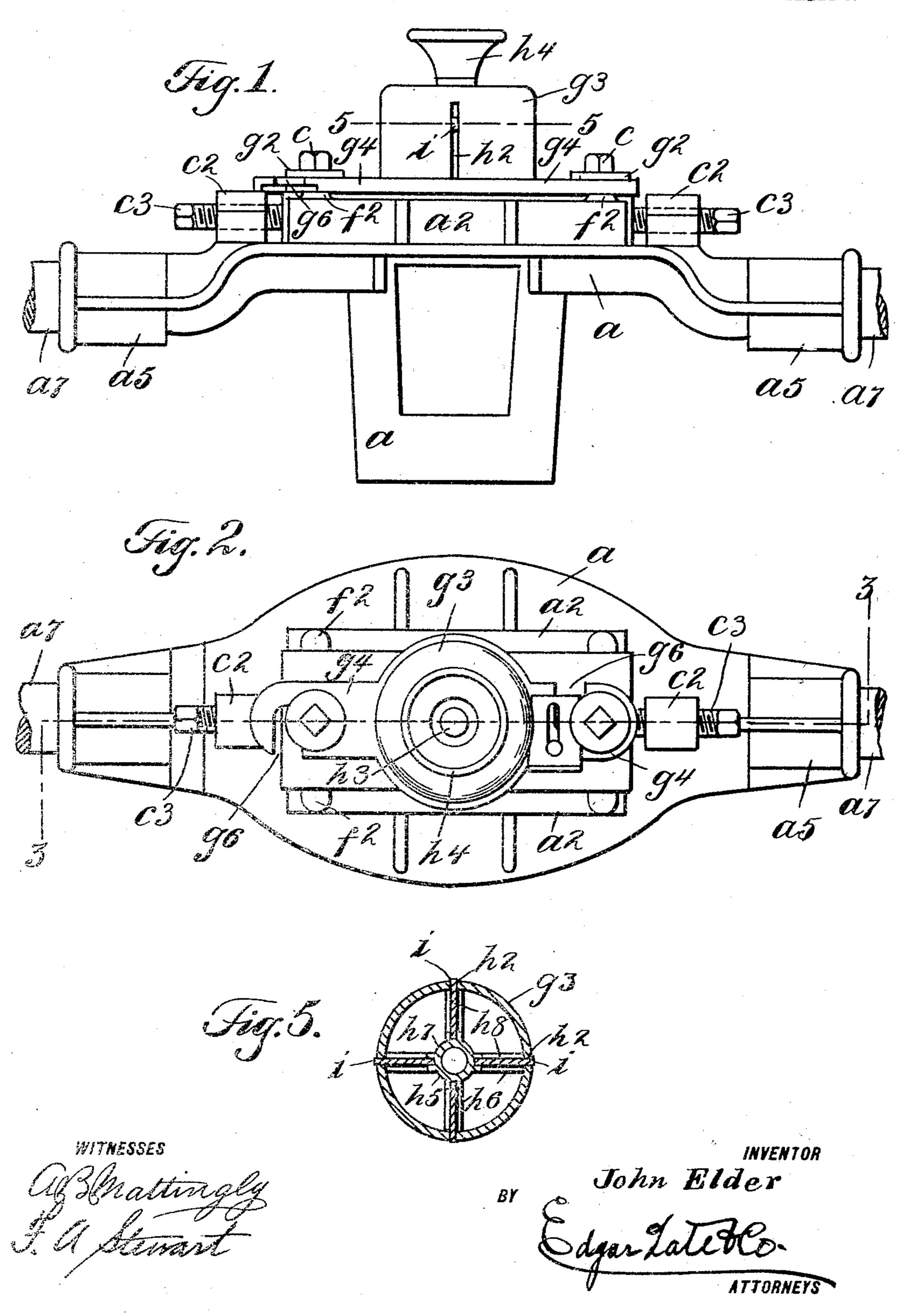
J. ELDER. PIPE REAMING DEVICE. APPLICATION FILED FEB. 9, 1904.

NO MODEL.

2 SHEETS-SHEET 1.



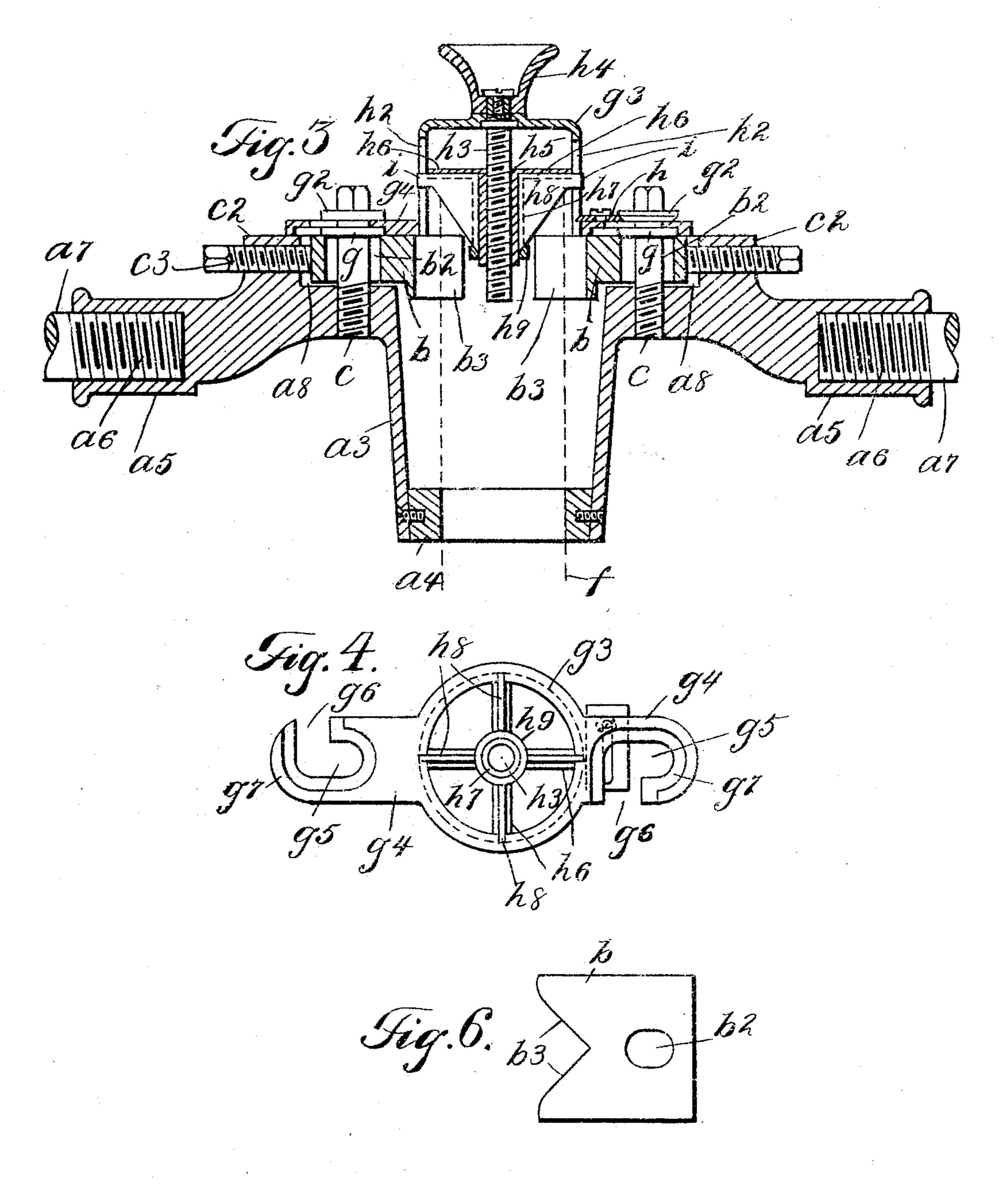
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2 SHEETS-SHEET 2.



WITNESSES

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JOHN ELDER, OF CORONA, NEW YORK.

PIPE-REAMING DEVICE.

SPECIFICATION forming part of Letters Patent No. 765,133, dated July 12, 1904.

Original application filed October 21, 1902, Serial No. 128,103. Divided and this application filed February 9, 1904. Serial No. 192,746. (No model.)

To all whom it may concern:

Be it known that I, John Elder, a citizen of the United States, residing at Corona, Long Island, in the county of Queens and State of New York, have invented certain new and useful Improvements in Pipe-Reaming Devices, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide an improved device for reaming pipes or the ends thereof; and with this and other objects in view the invention consists in a device or tool of the class specified constructed as here-

15 inafter described and claimed.

This is a divisional application based on an application for Letters Patent of the United States filed by me October 21, 1902, Serial No. 128, 103, and the invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my invention are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of my improved pipe-reaming device or tool; Fig. 2, a plan view thereof; Fig. 3, a central vertical longitudinal section on the line 3 3 of Fig. 2; Fig. 4, an inverted plan view of a locking-plate forming part of my improved pipe-reaming device or tool; Fig. 5, a section on the line 5 5 of Fig. 1, and Fig. 6 a plan view of a clamping-jaw forming part of the tool.

In the practice of my invention I provide a 35 stock or frame a, which is open centrally and provided at the top with parallel members or guides a^2 and at the bottom with a depending tubular portion a^3 , in the bottom of which is secured a collar a^4 . The ends of the stock a4° are provided with tubular members a⁵, adapted to receive the screw ends a⁶ of handlepieces a^7 and by means of which the tool may be turned in the operation thereof, as hereinafter described. The central portion of the stock or frame a is open between the parallel members or guides a^2 to correspond with the tubular depending member a^3 , and formed at the opposite sides of said opening and between said parallel members a² are rectangular spaces

or chambers a^8 , adapted to receive jaws b, a 50 plan view of one of which is given in Fig. 6 and two of which are shown in section in Fig. 3. The jaws b are provided with openings b^2 , through which are passed bolts c, the lower ends of which are screw-threaded and screwed 55 into the stock or frame, and said bolts are of less diameter than the openings b^2 . The stock or frame a is also provided at the opposite ends of the member a^2 with keepers c^2 , through which are passed screws c^3 , by means of which 60 the jaws b may be adjusted. The jaws b are of the same shape and size, and said jaws are shown in position for use in Fig. 3, and said jaws are provided at their inner ends with downwardly-directed portions b^3 , so as to pro- 65 vide greater surfaces for holding a pipe to be threaded, one of which is indicated in dotted lines at f in Fig. 3. The parallel members or guides a², which hold the jaws b in position, are preferably provided at the opposite 70 ends thereof with raised bearing portions f^2 , the tops of which are flush with the jaws b, which aid in holding the jaws b in position.

The bolts c in the form of construction shown, the lower ends of which in practice 75 are screw-threaded into the stock or frame a, are provided at their upper ends with two collars or flanges g and g^2 , and the remaining device which I employ, a bottom plan view of which is given in Fig. 4, a transverse section 80 in Fig. 5, and a vertical section in Fig. 3, comprises a hollow cylindrical portion g^3 , having opposite side bottom plates g^4 , provided with oblong openings g^5 , which open outwardly at the opposite sides, as shown at g^6 , and at 85 the bottom of the plates g^4 the walls of the openings g^5 are cut out to form grooves g^7 , adapted to receive the collars or flanges g of the bolts c, and when the reamer device proper is placed in position, as shown in Figs. 1, 2, 90 and 3, the flanges g and g^2 of the bolts c hold said reamer in place, and at one end of said reamer is an adjustable wedge-shaped plate h, which is placed between the corresponding top flanges or collars g^2 of the bolts c and the 95 body portion g^3 of the reamer, and by moving this plate longitudinally the reamer may be securely locked in position for use.

The hollow cylindrical body portion g^s of the reamer is provided in the opposite sides thereof with vertical slots h^2 , and passed through the top portion thereof is a screw h^3 , 5 having a handle-piece h^4 , by means of which said screw may be turned, and mounted on said screw and adapted to be moved vertically thereon by turning said handle-piece is a tubular casing h⁵, provided at its upper ends 10 with radially-arranged keepers h^6 , and said tubular casing is also provided with verticallyarranged keepers h^7 , as clearly shown in Fig. 5, and in these keepers h^6 and h^7 are placed triangular and radially-arranged cutter-blades 15 h^8 , which are held in place by a band h^9 , screwed onto the lower end of the tubular casing h^5 , and the cutters h^8 are provided with radial fingers or members i, which move into the slots h^2 in the body portion g^3 of the 20 reamer. It will be apparent that by turning the screw h^3 the cutters h^8 may either be raised or lowered, thereby adapting the device to pipes of different diameters, as will be readily understood.

When the parts are in proper position and properly adjusted and the pipe inserted, as indicated in dotted lines at f in Fig. 3, the tool may be turned so that the blades h^8 will ream out the end of the pipe, as will be readily 30 understood, and in practice the pipe is held stationary in the usual manner and by any preferred device or devices, and by adjusting the jaws b and the cutter or reamer proper larger or smaller pipes or the ends thereof 35 may be reamed, as will be readily understood.

The entire device is simple in construction and operation and perfectly adapted to ac-

complish the results for which it is intended, and various changes in and modifications of the construction herein shown and described 40 may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, what I claim as new, and desire to secure by Letters 45

Patent, is—

1. The herein-described pipe-reaming device, comprising a stock or frame having radially-adjustable jaws, a detachable reamer mounted over said jaws and comprising a cas- 50 ing having a vertically-arranged screw passed therethrough, and radially-arranged triangular cutters connected with said screw and adapted to be moved vertically by the turning thereof, substantially as shown and de- 55 scribed.

2. A pipe-reaming device, comprising a stock or frame having handles at its opposite ends and a central vertical opening, radiallyadjustable jaws mounted in said stock or frame 60 around said opening, a casing detachably connected with said stock or frame over said opening and jaws, and radially-arranged cutters mounted in said casing, substantially as shown

and described. In testimony that I claim the foregoing as

my invention I have signed my name, in presence of the subscribing witnesses, this 1st day of Feburary, 1904.

JOHN ELDER.

Witnesses:

F. A. STEWART, C. J. KLEIN.