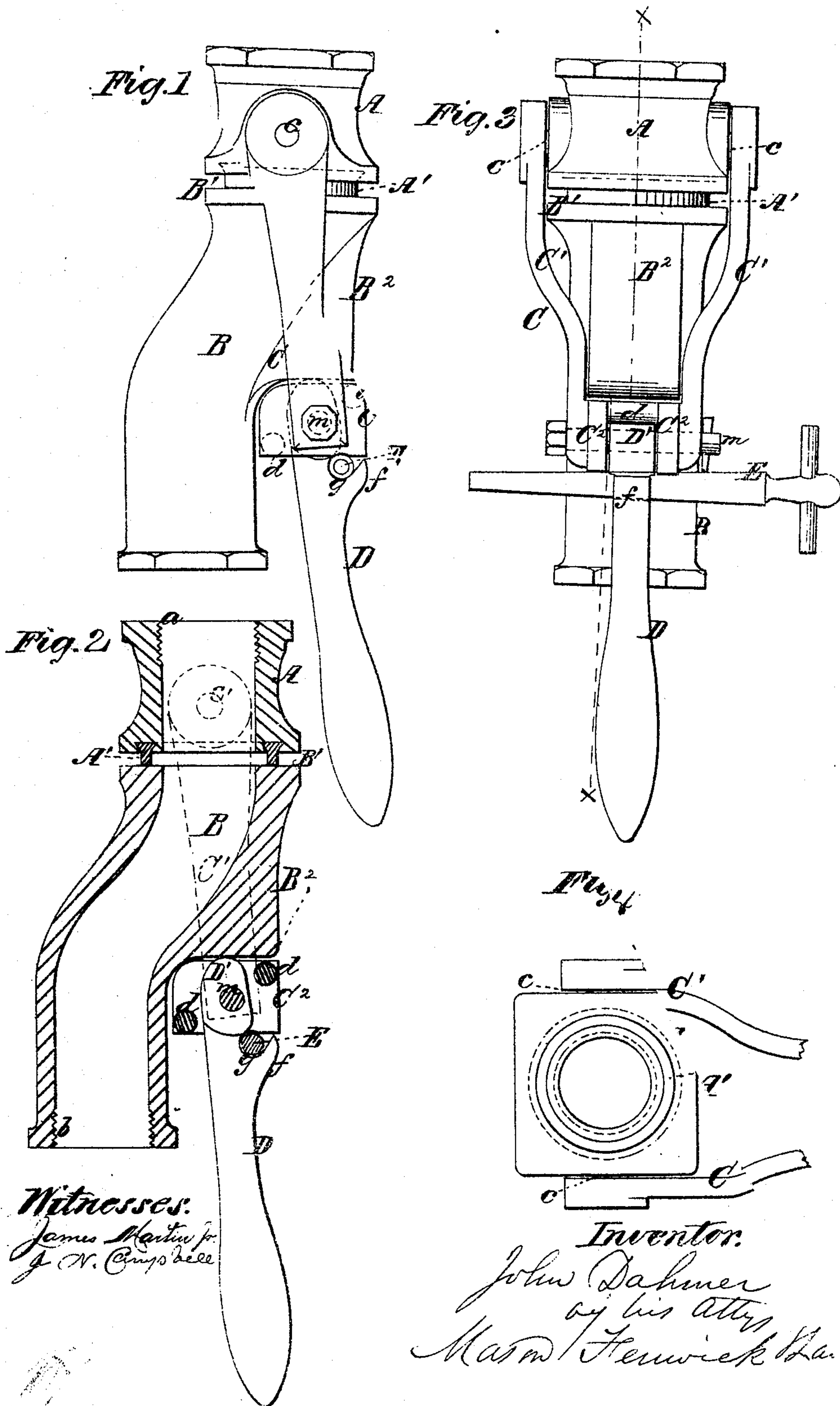


No. 146,990.

J. DAHMER.
Pipe-Couplings.

Patented Feb. 3, 1874.



Witnesses:

James Martin Jr.
J. W. Camps del.

Inventor.

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by his atty,
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UNITED STATES PATENT OFFICE.

JOHN DAHMER, OF CARROLLTON, LOUISIANA.

IMPROVEMENT IN PIPE-COUPPLINGS.

Specification forming part of Letters Patent No. **146,990**, dated February 3, 1874; application filed December 15, 1873.

To all whom it may concern:

Be it known that I, JOHN DAHMER, of Carrollton, in the parish of Jefferson and State of Louisiana, have invented a new and Improved Pipe-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side elevation of my improved coupling. Fig. 2 is a vertical section in the line *x x*, Fig. 3. Fig. 3 is a front elevation; Fig. 4, a view of the under side of the upper part of the coupling.

The same letters of reference in the several figures indicate corresponding parts.

The nature of my invention consists in the combination of the upper screw-threaded section, furnished with a hinged shackle, with the lower screw-threaded section, constructed with an offset, and the lever and locking-pin, the said sections of the coupling being constructed to make a steam, air, or water tight joint by swinging the shackle down under the offset, and then drawing the shackle and upper section down upon the lower section by depressing the lever and bringing its eccentric end in wedging contact with the offset, and confining the lever in place by means of the pin.

The following description will enable others skilled in the art to make and use it.

A is the upper part of the coupling. It is screw-threaded internally at *a*, to screw upon the end of a pipe leading from steam-generators. B is the lower part of the coupling, also screw-threaded internally, as at *b*, so as to be connected with a tank to be charged. The upper part of the coupling has a soft-metal ring, A', dovetailed into its lower end and faced off in a true lathe, and that end, B¹, of the lower part B upon which the ring bears is simply a smooth surface, scraped to a true surface-plate. The lower part B is made of cyma-reversa shape, and, from its top to near the center of its length, it is formed on one side with an offset, B², the bottom of which is curved slightly. The bend in the lower part brings this offset nearly in line with the journals of the shackle on the upper part A of the coupling, and thus a pull with the shackle in nearly a vertical line upon the part A is secured. C is the shackle, hung on trunnions *c*

c, cast on the sides of the part A. The side arms or straps C' C' of the shackle are united at their lower ends by means of two wide side jaws, *c*² *c*², which are connected together by two strong bolts, *d d*. Through the ends of the side pieces and through the jaws a hole is formed for the insertion of the fulcrum-pin *m* of the lever D. Between the jaws and the bolts the eccentric head D' of the lever D is placed, and the said fulcrum-pin *m* passes through the said head when it is inserted in the hole in the shackle, as shown. The lever D is formed with a curved enlargement, *f*, on its front side, just below the jaws of the shackle, and down in this enlarged portion an open slot, *g*, with curved sides is cut, and into this slot a tapered pin, E, is inserted when the lever has been drawn down nearly in a vertical position, said pin binding against the base of the slot and the under side of the jaws of the shackle, and thereby acting as a keeper or "chock" to the lever after the upper part of the coupling has been brought tight down upon the lower part of the coupling.

The ring A' may be of any suitable soft metal—say copper or babbitt-metal. I have found copper to answer well. Instead of using the ring, as shown, the joint may be a grooved or ball joint.

The construction of the coupling is very simple, and it can be operated in two or three seconds by a laborer of ordinary intelligence.

The object of this coupling is, generally, to make a steam, air, gas, or any other fluid joint perfectly tight.

I have used it for steam-pipes, particularly for the charging-pipe of a locomotive, and in its use it has been subjected to a test of two hundred and ten pounds' pressure of steam to the square inch, and it was found to remain perfectly tight and safe.

What I claim as my invention, and desire to secure by Letters Patent, is—

The upper part A, provided with journals and a shackle, C, in combination with the lower part B, constructed with the eccentric lever D D' and a locking-pin, E, all constructed and operated substantially as and for the purpose described.

JOHN DAHMER.

Witnesses:

GEO. W. TOPHAM,
ALBERT SWAIN.