

F. HANSON.
ADJUSTABLE COUPLING.
APPLICATION FILED OCT. 8, 1907.

948,221.

Patented Feb. 1, 1910.

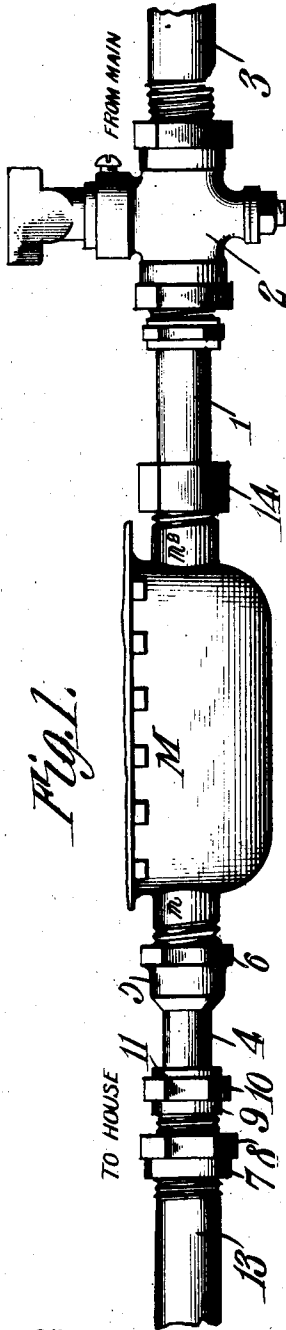


Fig. 1.



Fig. 3.

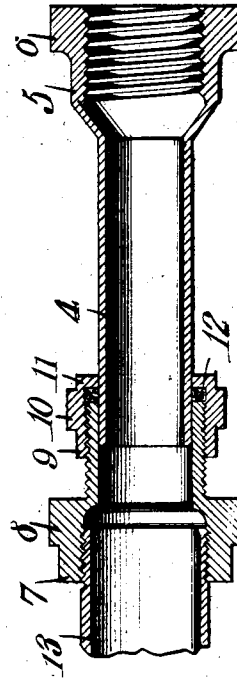


Fig. 2.

Witnesses:

E. J. Hansen
R. M. Elliott

Fredrik Hanson,
Inventor.

334

C. A. Snow & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

FREDRIK HANSON, OF ROME, GEORGIA.

ADJUSTABLE COUPLING.

948,221.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed October 8, 1907. Serial No. 396,518.

To all whom it may concern:

Be it known that I, FREDRIK HANSON, a citizen of the United States, residing at Rome, in the county of Floyd and State of Georgia, have invented a new and useful Adjustable Coupling, of which the following is a specification.

This invention relates generally to meter couplings, and more particularly to one adapted for connecting a water meter with the house service-pipe.

The object of the invention is to provide a coupling which will permit the ready removal of the meter for the purpose of inspection or repair, without the necessity of detaching any part of the coupling for the purpose, and which will also facilitate the connecting of the supply-pipe with the service-pipe temporarily during such repairs or inspection, whereby, except for a few minutes there will be no interruption of the supply of water to a dwelling.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists of the novel construction and combination of parts of a water meter coupling, as will be hereinafter fully described and claimed.

In the accompanying drawing, forming a part of this specification, and in which like characters of reference indicate corresponding parts: Figure 1 is a view in elevation, partly in section displaying a water meter coupling embodying the features of the present invention. Fig. 2 is a longitudinal section through the form of coupler shown to the left of Fig. 1. Fig. 3 is a side elevation of the bridge pipe.

Referring to the drawings, and to Figs. 1 and 2 thereof, M designates a water meter of any preferred type, and provided on opposite sides with threaded teats m and m^2 , one of which is connected with a pipe 1 that communicates through a valve 2 with a pipe 3 leading from the main, and the other of which is engaged by a slip joint or sliding nipple 4 that forms one of the features of novelty of the present invention. As shown in Fig. 2, that end of the nipple that engages the teat m is enlarged to constitute a coupling nut 5 the periphery of which is provided with wrench faces 6 by which the nipple may readily be detached by an ordinary wrench when desired to remove the meter. The nipple fits in a coupling member 7 provided with wrench faces 8. That

end of the coupling into which the nipple projects is provided with male threads that are engaged by a stuffing box 9 provided with wrench faces 10. This stuffing box is provided with an inturned shoulder 11, between which and the end of the coupling member is interposed a packing ring 12 of any suitable material, such as leather, rubber, asbestos, hemp or the like, and which when compressed by the stuffing box will be caused to impinge against the outer wall of the nipple, and thus secure a water-tight joint. The end of the coupling member opposite that engaged by the stuffing box is provided with female threads, and these are engaged by the service-pipe 13 that leads to the house.

With the form of the invention above described, when it is desired to remove the meter, for the purpose of inspection or repair, or to substitute another meter, the nut 14 that secures the pipe 1 to the teat m^2 is loosened, the valve 2 being first operated to cut off the supply of water to the meter. The sliding nipple 4 is then disconnected from the teat m , and a short bridge section of pipe 15 is substituted for the meter and engages, respectively, with the nut 14 and sliding nipple 6, as shown in Fig. 1. The valve 2 is then opened, thereby permitting water to pass to the house.

It will be seen from the foregoing description that by the provision of the sliding nipple 4, that the detachment of a water meter from the feed and service-pipes may readily be effected, without inconvenience to the householder, and further that different sized meters may be installed without requiring any change whatever in the structural arrangement of the usual coupling, consisting of the pipe 1 and nut 14, and the improved coupling constituting the subject-matter of the present invention.

Having thus fully described the invention what is claimed is:—

In a device of the class described, a meter provided with oppositely disposed, threaded teats; a supply pipe; a rigid coupling uniting the supply pipe and one teat; a service pipe; a nipple enlarged at one end to form a coupling nut to engage the other of said teats, the nipple being of less diameter than the service pipe and being arranged to be received within the service pipe; a coupling member threaded to engage the exterior of the service pipe and having a reduced neck

2

adapted to receive closely and in sliding relation, the end of the nipple, and to space the nipple against contact with the walls of the service pipe; a stuffing box threaded to engage the end of the reduced neck of the coupling member and to compact a packing about the nipple; and a bridge pipe having means for connection with the rigid coupling and with the coupling nut, when the rigid

coupling and the coupling nut are disengaged from the teats.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FREDRIK HANSON.

Witnesses:

W. H. ENNIS,
J. A. JENKINS.