(No Model.)

F. A. SCHIMPF.

STONE WETTING DEVICE.

No. 580,960. Patented Apr. 20, 1897.

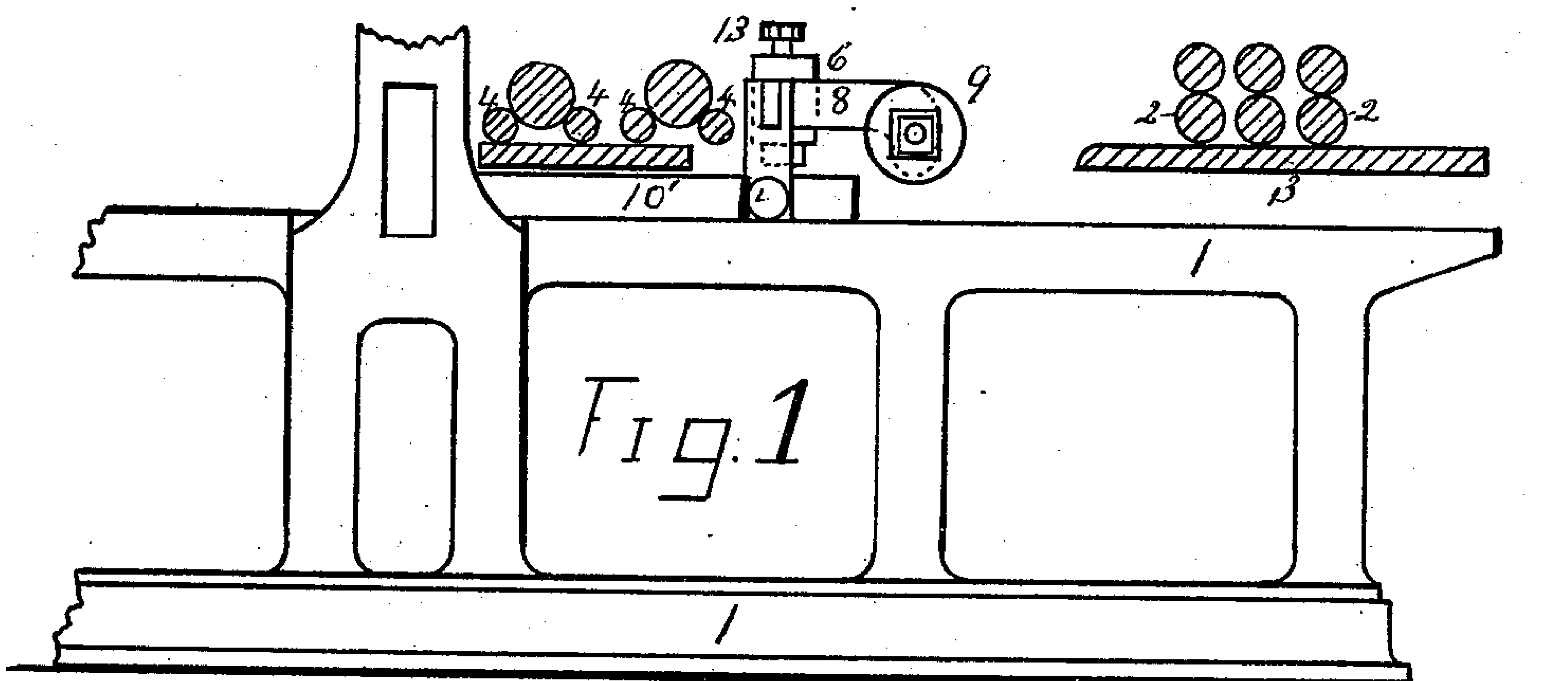

Fig. 1

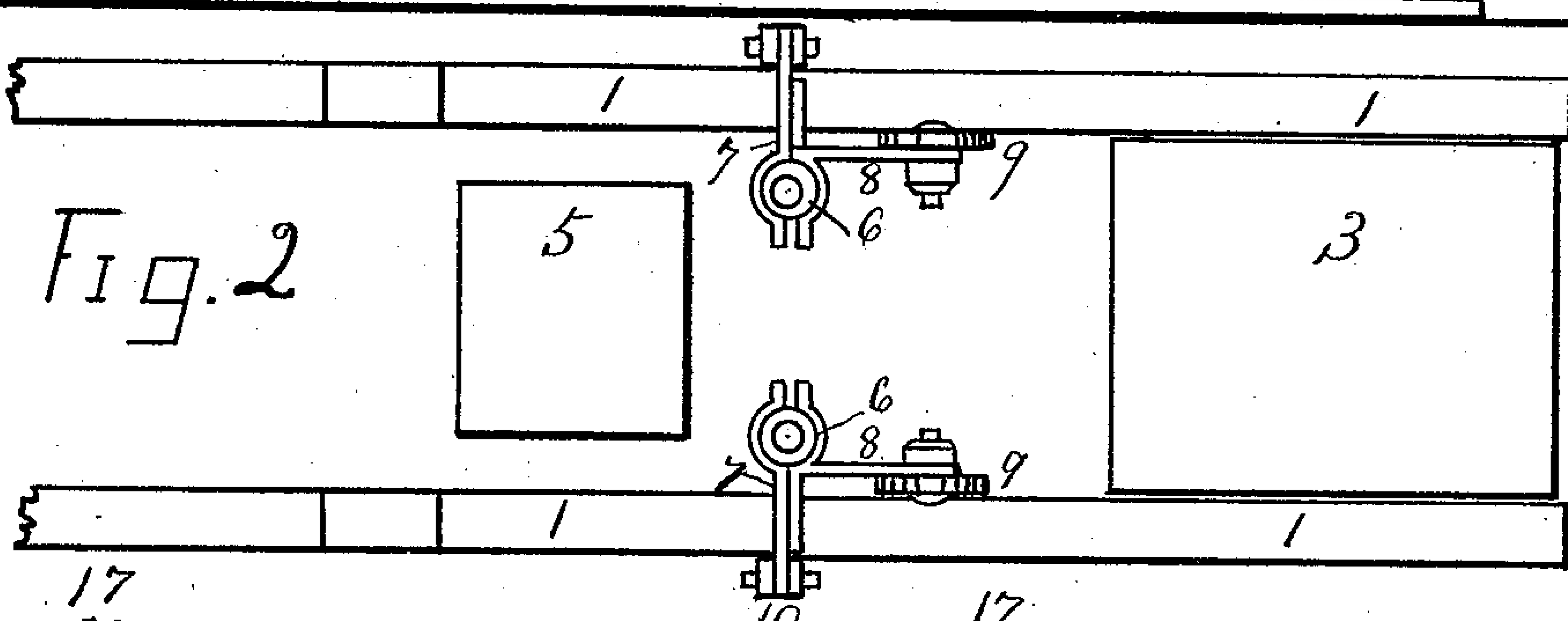

Fig. 2

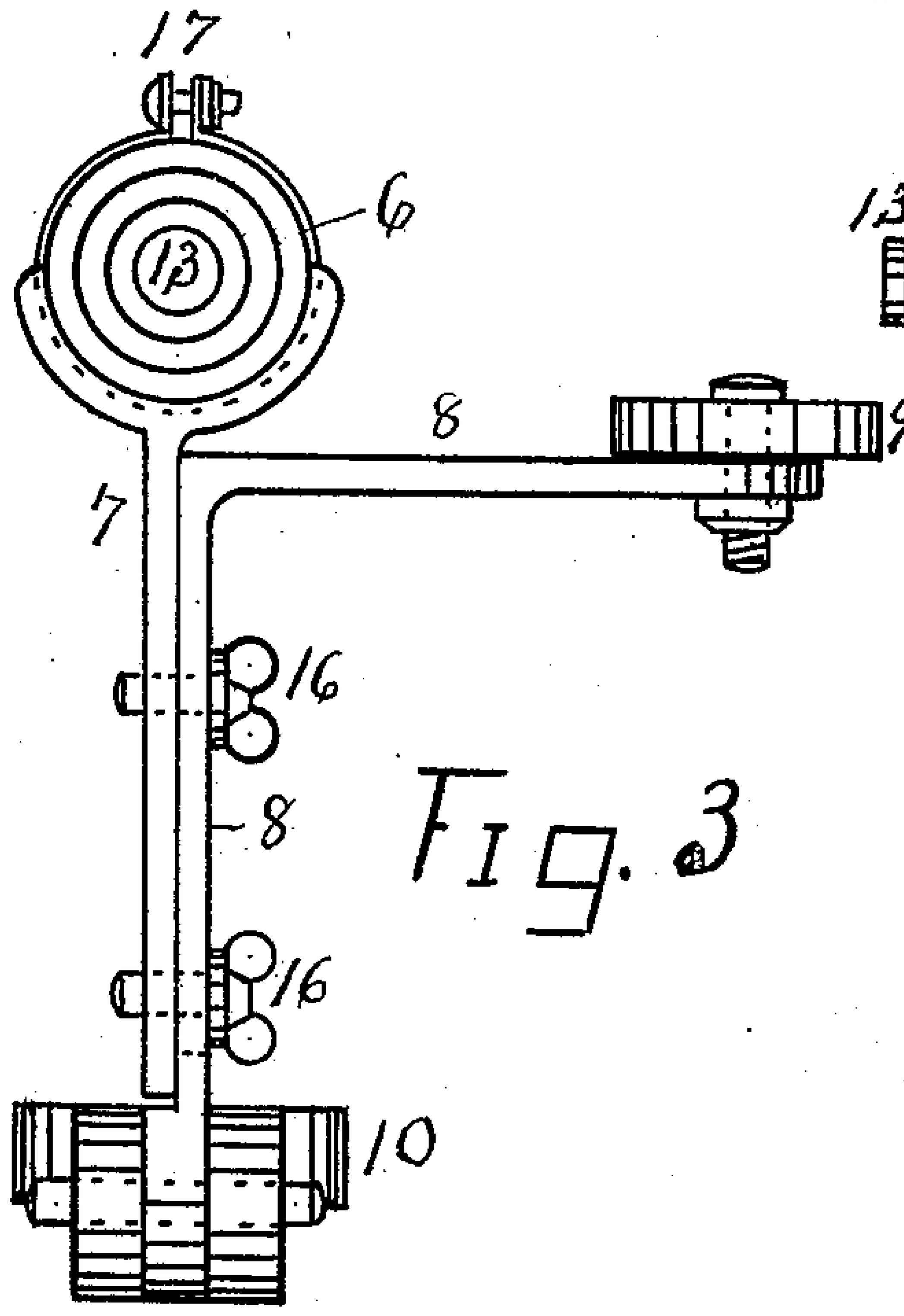

Fig. 3

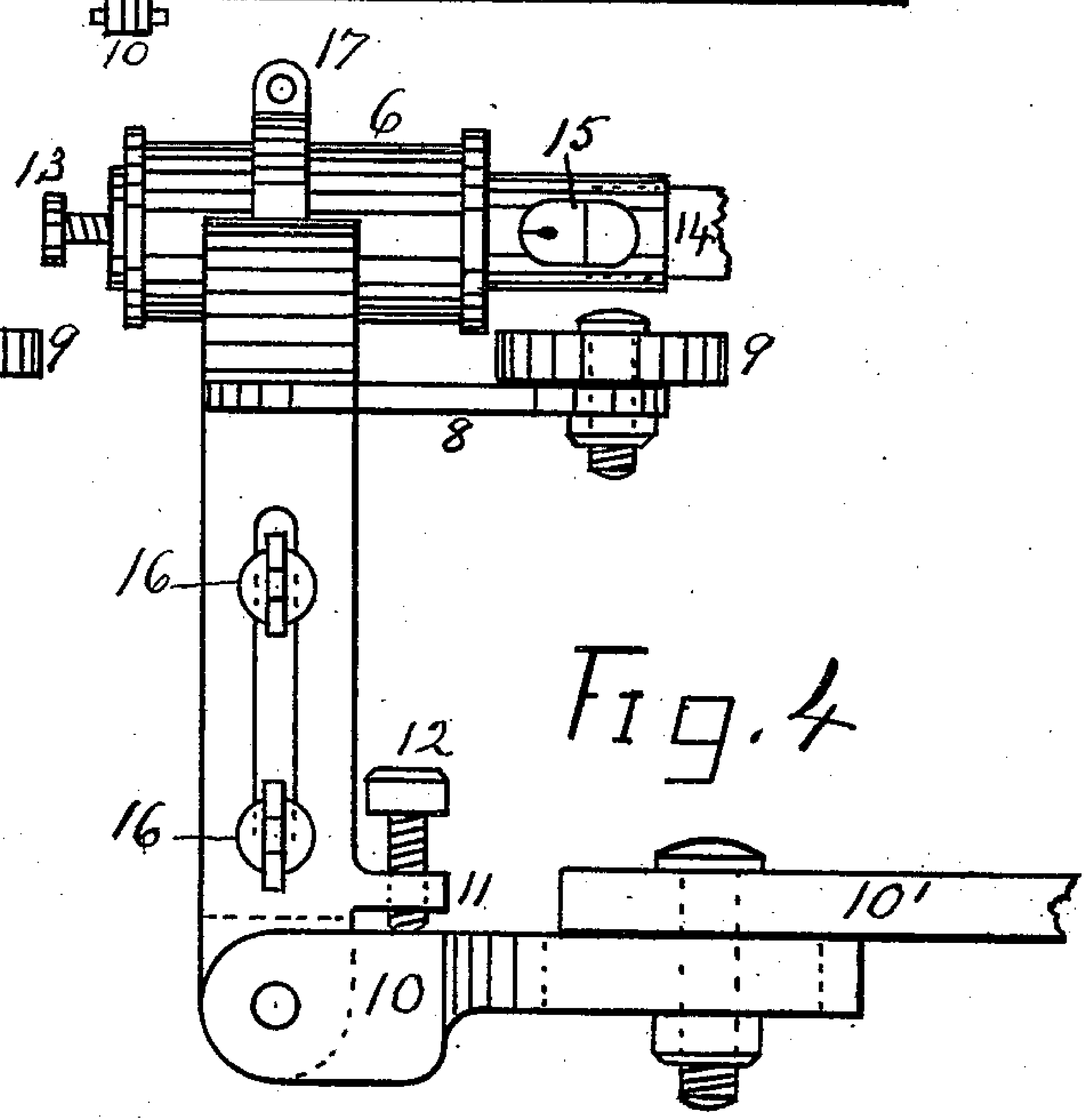

Fig. 4

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STONE-WETTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 580,960, dated April 20, 1897.

Application filed September 19, 1896. Serial No. 606,385. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. SCHIMPF, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Stone-Wetting Devices for Lithographic Power Printing-Presses, of which the following is a specification.

My invention relates to an automatic device for wetting the side edges of a lithographic stone used on power printing-presses.

The object of my invention is to properly wet the side edges of the stone, thereby preventing the stone from taking ink on the side edges. When the stone is wet by rollers, as at present, the rollers do not put sufficient water on the side edges of the stone. The edges, if not wet, will take ink, and if a sheet of paper larger than the stone be used (as is often the case) the edges of the paper will be blurred and marked by the ink. If wide paper is not used, the accumulated ink is carried to the blanket on the cylinder and to the ends of the damper-rollers, requiring them to be often cleaned by an ink-solvent, which in a short time will make them soft, spongy, and destroy their effective working.

Previous to my invention small help has been employed, one on each side of the press, and they by hand hold a wet sponge to the side edges of the stone and wet it as it passes on the traveling bed to the ink-rollers.

My improvement consists in the combination of a regulated feed-drop water-cup having a piece of sponge below the water-drop. Said sponge is held over the side edges of the traveling stone by a pivoted arm, and to which arm is so connected a loose-running wheel as will raise the cup and the wet sponge as the cup and wet sponge are passing over the traveling ink-slab, as illustrated in the accompanying drawings, in which—

Figure 1 is so much of a side of a lithographic power-press as is required to show my improvement attached thereto. Fig. 2 is a top view of Fig. 1, inking-rollers not shown. Fig. 3 is a top view of my improvement detached from the press. Fig. 4 is a side view of Fig. 3.

Similar numerals of reference refer to like parts in all figures.

1 represents the frame of an ordinary lithographic power printing-press; 2, the distributing ink-rollers; 3, the traveling ink-slab; 4, the inking-rollers, and 5 the traveling lithographic stone. These parts are constructed and operated as usual in lithographic power printing-presses.

6 is a water-cup having an adjustable feed-drop. Below the sight and drop 15 is a piece of sponge 14. This cup 6 and adjustable sight-feed drop are fully described in Patent No. 314,695, of March 31, 1885.

The cup 6 is fixed in a socket at the end of arm 7 and held by a clip 17. The arm 7 is by two wing-bolts 16 fixed to the right-angle arm 8. This arm is pivoted in a stand 10, which stand is fastened to a part of the press-frame 10. (See Figs. 1 and 4.) The right-angle arm 8 has a lug 11, Fig. 4. Into this lug 11 is screwed a regulating-screw 12. To the arm 8, mounted loose on a stud, is a wheel 9. This wheel should be of metal, by preference brass.

The operation of my invention is as follows: By means of the clip 17, wing-bolts 16, and set-screw 12 the sponge 14 is set so that it will rub on the side edge of stone 5 as it passes under the sponge 14. The regulating-screw 13 in the cup may be set so that it will give one drop a second or one drop in three seconds. It can be so adjusted that the sponge will be kept wet and wet the edge of the stone as it passes under the sponge, thereby preventing the edges of the stone from taking ink. As the ink-slab runs under the wheel 9 the wheel and arm will raise the cup 6 and sponge 14, so that the sponge will not touch the ink on the slab 3 as it travels under the sponge.

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

In lithographic power printing-presses, an automatic edge-wetting device for lithographic stones, consisting of the combination of a water-cup having an adjustable water-drop and a moistening device which comes in contact with the edges of the stone, a pivoted arm for suspending said water-cup, a loose-running wheel and suitable connections whereby the cup will be raised while passing over the ink-slab thereby preventing the moistening-surface from coming in contact with the ink on said slab.

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Witnesses:
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