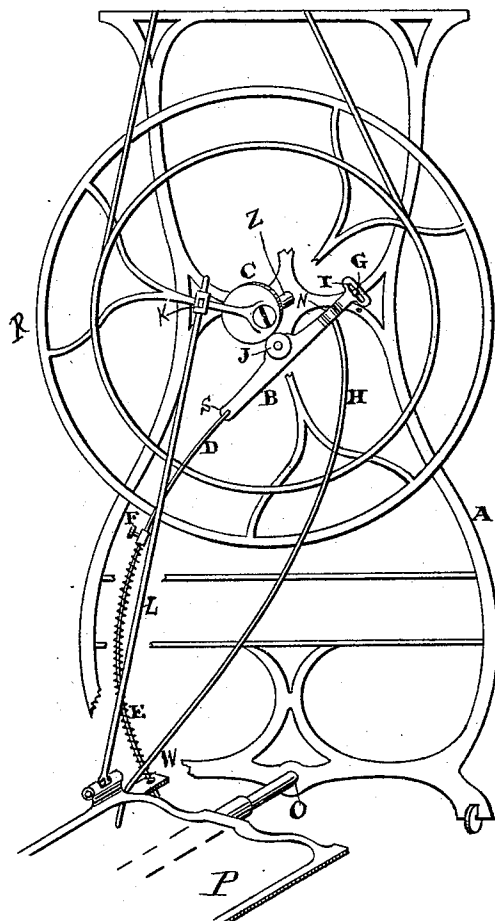


(No Model.)

C. M. CURREY.
DEVICE FOR OVERCOMING DEAD CENTERS.

No. 517,264.

Patented Mar. 27, 1894.



Witnesses.
Augustus M. Gillett
Alfred B. Brown

Inventor.
Caleb M. Curry

UNITED STATES PATENT OFFICE.

CALEB M. CURREY, OF BAY CITY, MICHIGAN.

DEVICE FOR OVERCOMING DEAD-CENTERS.

SPECIFICATION forming part of Letters Patent No. 517,264, dated March 27, 1894.

Application filed November 28, 1892. Serial No. 453,436. (No model.)

To all whom it may concern:

Be it known that I, CALEB M. CURREY, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Devices for Overcoming Dead-Centers, of which the following is a specification, reference being had to the accompanying drawing, which shows in elevation my invention.

This invention relates to a device for overcoming dead-centers.

A, represents the frame of the machine, R the driving wheel, K the crank, P the treadle, L the connecting rod from crank to treadle, and O the treadle bearing, all of which are of ordinary and well known construction and arrangement, and are simply shown as a means for carrying out my invention.

Referring to my invention, the eccentric C, is secured to the crank shaft, a transverse lever B, is secured to frame A at G, the opposite end S, supported by a curved rod D, with a collar at F secured thereto, a coil spring E slid on the lower portion of curved rod D, and the end of the rod inserted through a hole provided in bracket W, secured to treadle P, the lower end of coil spring E, rests on bracket W, and collar F serves to give coil spring E proper tension to press transverse lever B upward, pressing disk J, against eccentric C. Disk J, is set slightly inclined toward the crank shaft Z with the object of the disk press-

ing one side of the eccentric pressing it off from the lower dead-center; the upper dead-center is overcome by adjusting coil spring E at collar F. An auxiliary reflexible spring H is secured to transverse lever B, at N, curved, and the lower end resting on bracket, with the point sufficiently curved and hooked over the bracket to keep it in position, for the object of adjusting transverse lever B at elliptical hole I, and to act with coil spring E, on the treadle at bracket.

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

The combination in a mechanical movement of the eccentric placed on the crank shaft, a transverse lever provided with an elliptical hole I, pivoted to the frame of the machine at G, with a disk pivoted at J, a curved rod secured to the opposite end S, a collar secured to the rod at F, a coil spring slipped on the lower portion, bracket W secured to the treadle and having a hole through it, and the lower end of the rod E inserted therein, an auxiliary reflexible curved spring H, secured to transverse lever B, at N, the lower end resting on bracket W, and the point curved and hooked over, substantially as set forth.

Dated Bay City, Michigan, November 10, 1892.

CALEB M. CURREY.

Witnesses:

H. M. GILLETT,
ALFRED B. LENNOX.