(No Model.)

J. W. JAMES.

BATHING APPARATUS.

No. 350,490. Patented Oct. 12, 1886.

Fig. 1.

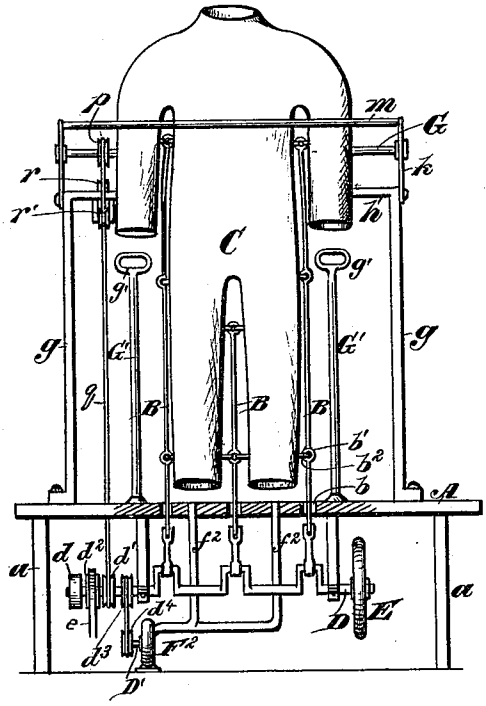


Fig. 2.

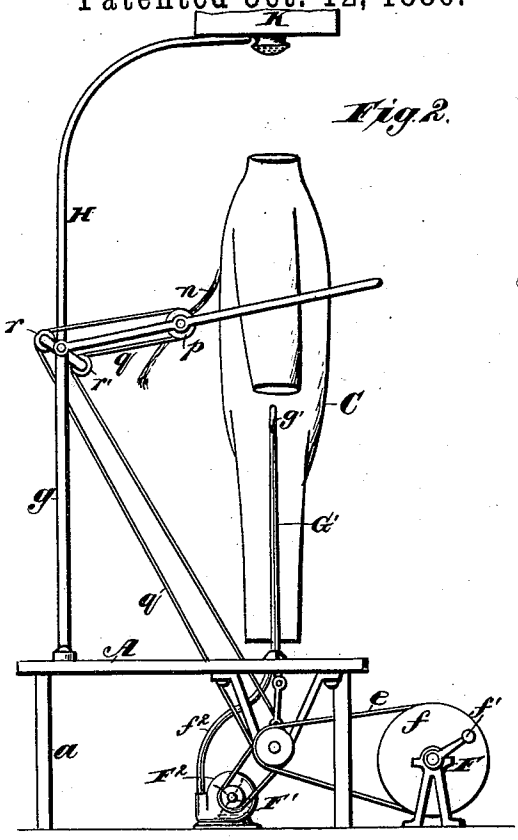


Fig. 3.

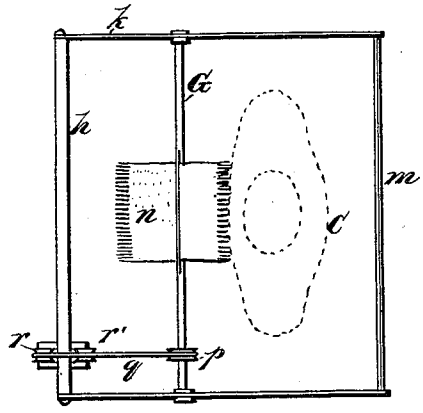
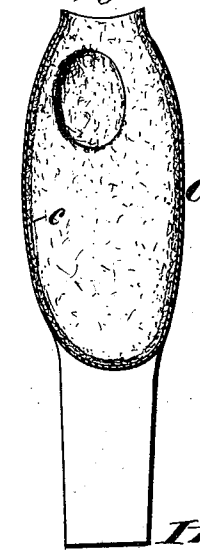


Fig. 4.



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UNITED STATES PATENT OFFICE.

JACK WILLIAM JAMES, OF CUBA, TENNESSEE.

BATHING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 350,490, dated October 12, 1886.

Application filed March 10, 1886. Serial No. 194,750. (No model.)

To all whom it may concern:

Be it known that I, JACK WILLIAM JAMES, a citizen of the United States, residing at Cuba, in the county of Shelby and State of Tennessee, have invented new and useful Improvements in Bathing Apparatus, of which the following is a specification.

This invention relates to an improved bathing apparatus arranged for an automatic frictional ablution and drying of the bather's body.

The invention consists in the combination, with a loose-fitting and sponge-lined flexible suit or garment for incasing the bather's body, of a rotary crank-shaft connected with said incasing-garment for the purpose of moving it up and down in frictional contact with the body, while a stream or spray of water is allowed to trickle on the bather's head and so over his body within its inclosing-garment.

The invention also consists in the combination, with an adjustable rotary shaft, of a towel attached thereto for applying a succession of frictional blows to any part of the bather's body.

The invention further consists in the construction and combination of parts in a bathing machine or apparatus, as hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a front elevation of my improved bathing apparatus. Fig. 2 is a side elevation of the bathing-machine with the flexible bathing-suit disconnected. Fig. 3 is a plan or top view of the machine. Fig. 4 is a sectional view of the bathing-garment.

Referring to the said drawings, the letter A designates a platform supported on posts *a* or otherwise, and beneath this platform may be arranged a suitable receptacle (not shown) for receiving the waste water; or any suitable drainage may be provided. The platform A is provided with slots or openings *b b* for passage of rods B B, to which is attached a loose-fitting flexible bathing-garment, C, which is preferably lined with soft sponge *c*, or similar rubbing material, as shown in Fig. 4. The garment-supporting rods B are respectively connected to the several arms of a multiple crank-shaft, D, which is mounted beneath the platform A, as shown in Figs. 1 and 2. This crank-shaft carries at one end a fly-wheel, E, and at or near its other end are four pulleys, *d*, *d'*, *d²*, and *d³*, the purpose of which will be hereinafter explained. The multiple crank-shaft is rotated by means of belting *e*, placed on the pulley *d²*, and on a larger pulley, *f*, carried by a driving-shaft, F, which may be actuated by hand through a crank-handle, *f'*, at one end, or said driving shaft may be rotated by power applied in any convenient manner. It is obvious that the rotation of the crank-shaft D will reciprocate the rods B, and thereby move the sponge-lined garment C up and down on the body of the bather, who stands on the platform A, as shown in Fig. 1. The rods B are provided with eyes or openings *b'* for connecting with loops or rings *b²* or other fastenings, by which connection is had with the loose-fitting bathing-garment.

At the rear of the platform A are two uprights, *g g*, having a height sufficient to bring their upper ends about in line with the middle of the bather's back. These uprights or standards *g g* are connected at the top by a cross-bar, *h*, and to the upper end of each standard *g* is pivoted a spring-steel strip, *k*. The spring-strips *k k* extend across the platform A, and are connected in front of the bather by a horizontal rod or bar, *m*. The spring-strips *k k* support a rotary shaft, G, which is slotted or otherwise arranged for attachment of a towel, *n*, to be used in applying a succession of blows to the bather as the shaft G rotates. The shaft G carries a pulley, *p*, by which it is driven through a belt, *q*, from the pulley *d'* on the crank-shaft D, said belt being also supported by pulleys *r r'*, connected to the cross-bar *h* or other part of the platform-frame. The pulley *d* is mounted loosely on the crank-shaft D, while the pulley *d²* is fast, and the pulley *d'* may be arranged in any well-known manner, so as to be either fast or loose, to actuate the towel-shaft G, or not, as may be required. If it is desired to use the bathing-garment C independent of the shaft G and its attached towel, the pulley *d'* will be loosened so that the belt *q* and shaft G will remain at rest while the crank-shaft D and the connected bathing-garment are in operation. It will also be seen that by shifting the belt *e* to the loose pulley *d* the crank-shaft D can be brought to rest without stopping the driving-shaft F. When the pulley *d'* is made fast, so as to actu-

ate the rotary towel-shaft G, the bather, by taking hold of the horizontal bar *m*, can move the rotating shaft G up and down and to the right and left, by reason of the pivoted arrangement of the spring-strips *k k*, thus applying the rotating towel *n* to any portion of his back.

To the bar *h*, at the top of the standards *g g*, is attached a bent rod, H, from which is suspended a suitable water-vessel, K, adapted to deliver a douche or shower of water on the bather's head and body. It will be seen that by means of the loose-fitting sponge-lined bathing-garment C, moved in frictional contact with the bather's body while subjected to the shower or douche, an agreeable and cleansing bath can be obtained with all the healthful benefits due to a brisk excitation of the skin. When the rotating towel *n* is employed, it may be used either wet or dry, and either alone or in connection with the bathing-garment C, said towel being especially useful when it is desired to promote a proper circulation of the blood by means of a succession of blows applied to the body. The towel is also useful for drying the bather's back.

On the crank-shaft D may be placed an additional pulley, d^3, which can be arranged in any suitable manner, so as to be made either fast or loose on said shaft, as required. This pulley d^3 is belted to a pulley, d^4, on a shaft, D', which drives a fan, F', in the casing F^2. The fan casing F^2 is provided with air-ducts f^2 f^2, arranged to convey a current of air up each leg of the bathing-garment. A cooling and evaporating effect can thus be readily produced during the bath, or by disconnecting the pulley d^3 the fan can be made to remain inactive.

If desired, the platform A can be provided with uprights G', having handles *g'*, by which the bather can steady himself.

What I claim as my invention is—

1. The combination, in a bathing apparatus, of a flexible garment for incasing the body of the bather, provided with a lining of sponge, with rods for supporting the garment along its length and mechanism for reciprocating the rods to move the garment in contact with the body of the bather, substantially as described.

2. In a bathing apparatus, a rotary shaft having a towel detachably secured thereto, substantially as described.

3. The combination, in a bathing apparatus, of a flexible garment for incasing the body of a bather, rods extending along the length of the garment and connected therewith at different points, a crank-shaft connected with the rods, and means for operating said shaft, substantially as described.

4. In a bathing apparatus, the combination of a loose-fitting bathing garment, a crank-shaft and connections for moving said garment in frictional contact with the bather's body, and a rotary shaft having a towel secured thereto for applying a succession of blows to the body, substantially as described.

5. In a bathing apparatus, the combination of the platform A, the crank-shaft D, the bathing-garment C, rods B, for connecting said garment and crank-shaft, and the driving-shaft F, geared with said crank-shaft, substantially as described.

6. In a bathing apparatus, the combination of the platform A, having standards *g g*, connected by cross-bar *h*, the pivoted spring-strips *k k*, connected at their forward ends by cross-bar *m*, the rotary shaft G, supported by the spring-strips *k k* and carrying a towel, *n*, and means for actuating said shaft, substantially as described.

7. In a bathing apparatus, the combination of a douche or shower, a loose-fitting sponge-lined bathing-garment, adapted to be automatically moved in frictional contact with the body, and a rotary shaft carrying a towel to deliver a succession of blows on the body, substantially as described.

8. In a bathing apparatus, the combination of a douche or shower, a loose-fitting sponge-lined bathing-garment, a fan having air-ducts leading to each leg of said garment, and mechanism for moving said garment in frictional contact with the body, substantially as described.

9. In a bathing apparatus, the combination of a douche or shower, a loose-fitting sponge-lined bathing-garment, a rotary crank-shaft, and rods for connecting the bathing-garment to the arms of said shaft, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JACK WM. JAMES.

Witnesses:

JNO. L. COOPER,

WM. H. PULLEN.