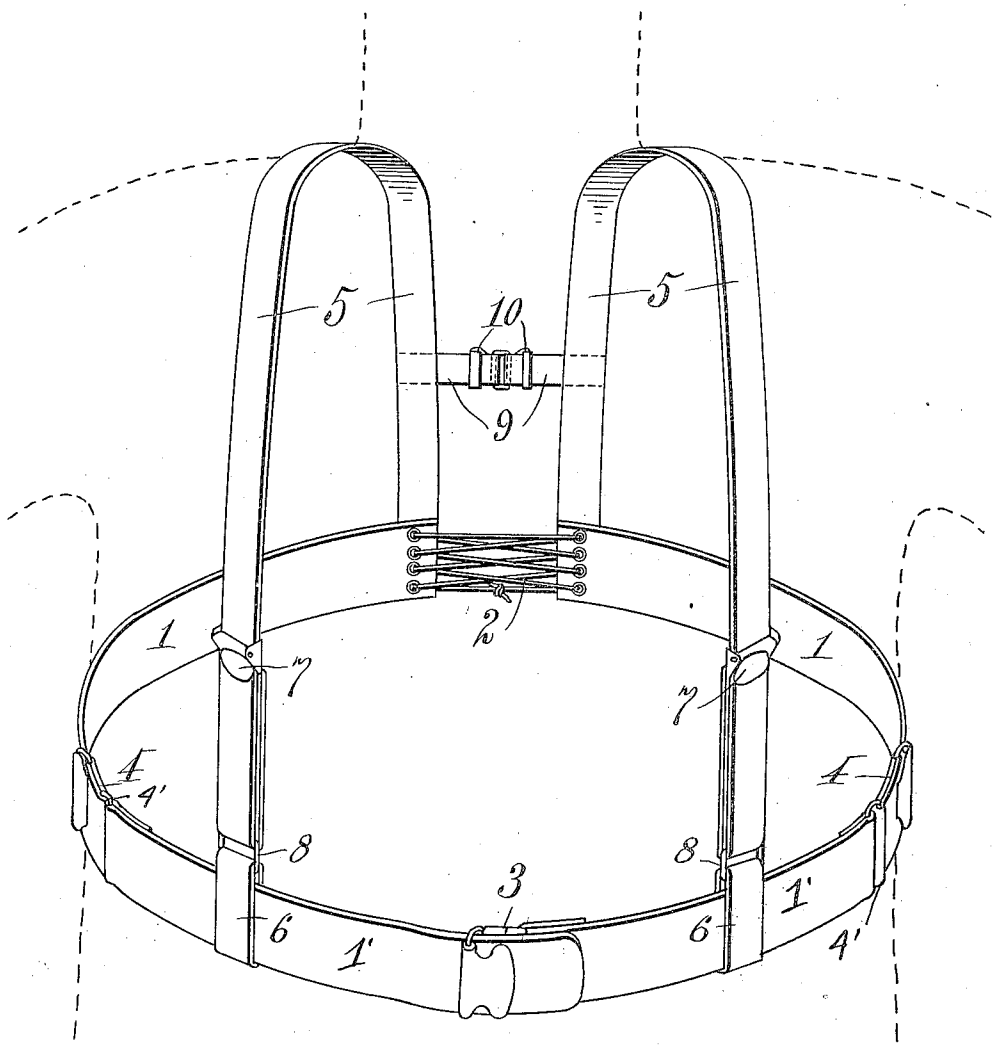
C. F. & J. P. DICKMAN.

DEVICE FOR PROMOTING DEEP BREATHING.

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1,074,846. Patented Oct. 7, 1913.



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DEVICE FOR PROMOTING DEEP BREATHING.

1,074,846. Specification of Letters Patent. Patented Oct. 7, 1913.

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To all whom it may concern:

Be it known that we, CHARLES FRANKLIN DICKMAN and JOHN PETER DICKMAN, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Devices for Promoting Deep Breathing; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention comprises a brace to be worn upon the body to promote deep breathing.

The object of the said invention is to provide a body brace constructed and arranged to encircle the torso at different points, for example, the chest or diaphragm, and to exert a yielding pressure around the front and front sides of the torso of less resisting effect than at the back.

To these ends, the device comprises a circular adjustable band for the body which is suspended from shoulder straps and united at the back by an elastic cord which exceeds in tension the elasticity of the front portion of said band.

In the accompanying drawing, the device is shown on a body, the outline of which is shown in dotted lines. The body belt or girdle consists of back and front portions 1 and 1′, the former being non-elastic and the latter elastic. These two parts 1 and 1′ are connected at the sides by loops 4′ and buckles 4 by means of which the girth of said belt may be increased to suit the body of the wearer. The said belt in front is connected by a combined loop and buckle 3, while at the back the non-elastic portions are connected by an elastic lacing cord 2. This cord 2 exceeds in tension the elasticity of the front sections of the belt. In breathing, the chest of the wearer of the device meets with only the necessary resistance to be conveniently overcome by the expansion of the chest. The pressure of the belt upon and around the chest is a constant reminder to the wearer. As a consequence, there is an effort on the part of the wearer to overcome the said resistance through an expansion of the chest by deep breathing. The effect of this pressure is, in other words, such as creates, on the part of the wearer, a desire for frequent deep breathing and an exercise of the muscles of the body.

It will be seen that the elastic portion of the belt extends over the chest. In this position it yields to movement of the chest in breathing, always exerting a certain pressure which induces deep breathing from an unconscious effort on the part of the wearer to resist the pressure exerted at that point by the elasticity of the belt. The portion of the belt which lies against the back is non-yielding inasmuch as the back is not expanded in the breathing process. The arrangement of the elastic and non-elastic parts is such that there is no chafing of the portion of the body not expanded in breathing, to-wit, the back. The buckles 4 are placed at the side between the elastic and non-elastic portions, and the buckles 3 are placed in the front or elastic portion. It will, therefore, be seen that the belt may be adjusted to suit the desired chest expansion as that increases from exercise, and without disturbing the belt adjustment at the back. The belt may, therefore, at all times be adjusted to suit the wearer thus avoiding undue friction between the belt and the more immovable part of the body.

The belt or girdle is supported by non-elastic shoulder straps 5 which are united at their rearward ends to the ends of the back portions of said belt, and are connected at a convenient point by adjustable cross straps 9 by means of a loop and buckles 10. The front ends of said shoulder straps are of sufficient length to permit the belt or girdle to be lowered around the diaphragm in case it is desired to promote breathing in that part of the body. As shown in the accompanying drawings, the said belt is elevated to surround the upper portion of the body. This is done by overlapping the ends of said shoulder straps in two or more layers. The said shoulder straps are connected to the front portion of the belt or girdle by means of non-elastic loops 6, which are attached to the belt, loops 8, and combined loops and clasps 7. In wearing the device, the belt or girdle should be tightened by means of the buckle 3 to an extent that produces sufficient constant pressure around the body to remind the wearer of the ever presence thereof. This may be done without any inconvenience, and, when properly ad-

justed, there is produced a more or less constant desire on the part of the wearer to expand the chest by deep breathing to relieve the body of such pressure.

We claim—

In a device of the type specified, a belt adapted to fit over the chest of the wearer and constructed of adjustable elastic and non-elastic portions, said non-elastic portions being adapted to fit across the back of the wearer and the elastic portion being adapted to fit across the chest of the wearer, buckles located at the sides of said belt between the elastic and non-elastic portions and on said elastic portion, whereby said elastic portion may be adjusted to an enlarging chest, and shoulder straps attached to the front and back of said belt, and adapted to support the belt upon the chest of the wearer.

In testimony whereof we affix our signatures in presence of two witnesses.

CHAS. FRANKLIN DICKMAN.
JOHN PETER DICKMAN.

Witnesses:
R. J. McCarty,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."