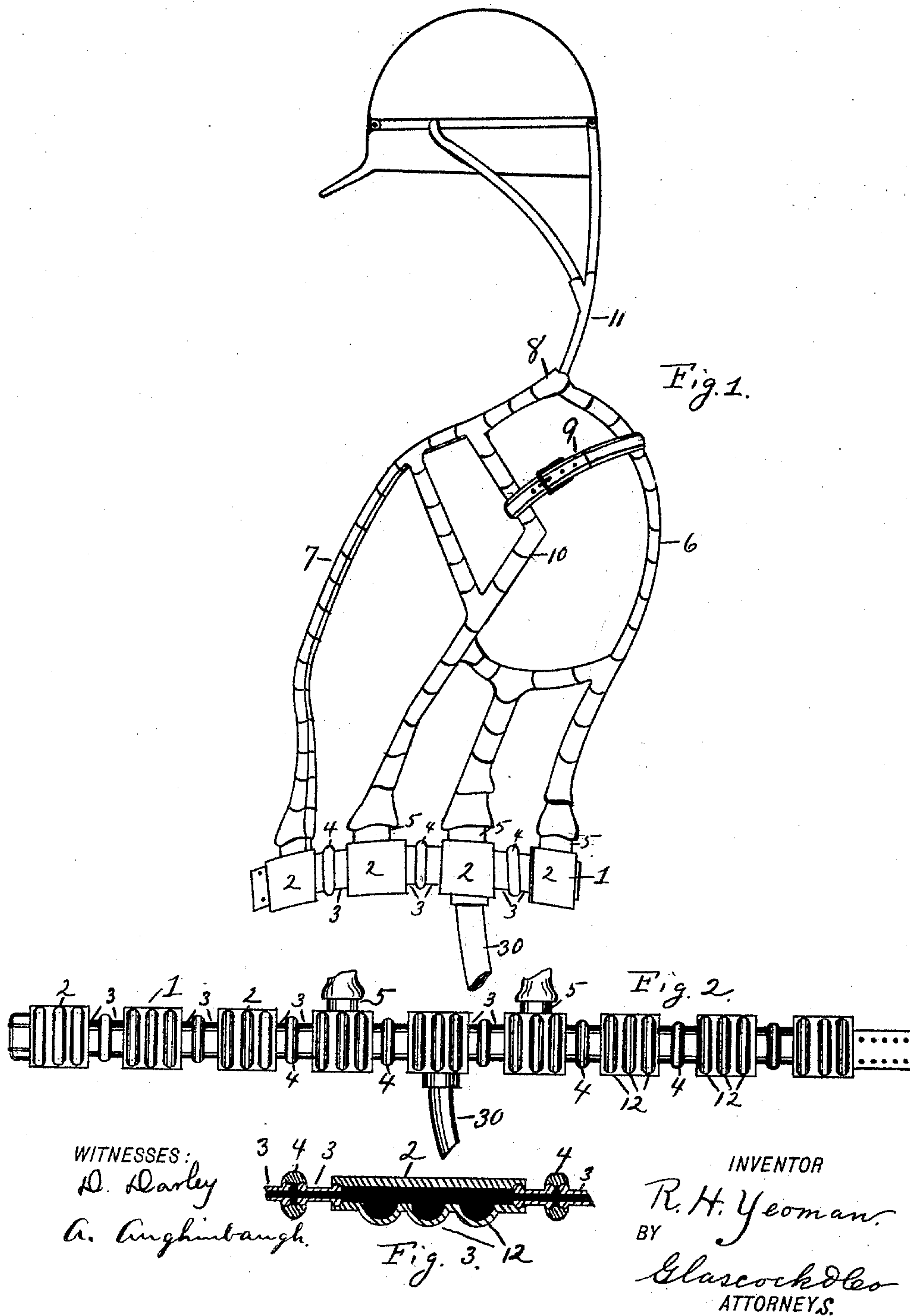


(No Model.)

R. H. YEOMAN.  
HOT AIR APPARATUS.

No. 491,627.

Patented Feb. 14, 1893.



# UNITED STATES PATENT OFFICE.

ROBERT HENRY YEOMAN, OF OMAHA, NEBRASKA.

## HOT-AIR APPARATUS.

SPECIFICATION forming part of Letters Patent No. 491,627, dated February 14, 1893.

Application filed April 29, 1892. Serial No. 431,172. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT HENRY YEOMAN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented a certain new, useful, and valuable Improvement in Hot-Air Apparatus, of which the following is a full, clear, and exact description.

My invention has relation to an apparatus for giving warmth to the body while it is exposed to cold weather and more especially to warm the body while taking long drives in the cold weather, and it consists of the novel construction and arrangement of its parts.

My invention is described as follows:

In the accompanying drawings: Figure 1, represents a coat or jacket made of either metal or rubber tubing and is adapted to be worn on the body. Fig. 2, is a plan view of the belt of the jacket. Fig. 3, is a sectional view of part of the belt.

The coat or jacket consists of a hollow metallic belt 1, of which the parts 2, and the parts 3, are put together with ball and socket joints, as shown in Fig. 3, and the parts 3, are connected with a ball and socket coupling 4, see also Fig. 3. Thus it will be seen that I construct a belt out of metal which is longitudinally flexible and laterally very stiff, and the said belt is broader than it is thick; also as the belt is put together by ball and socket joints it can be readily put on and taken off by the wearer. Connected to the parts 3, of the said belt, are the distributing branches 5. These branches are preferably made of metal tubing and put together with ball and socket joints in small sections; but they can be made of rubber or other analogous hollow substance; their function being to convey heat to the body of the wearer. These branches may be made round, square, hexagonal, elliptical, oblong or otherwise; and they may be entwined about the body to suit the pleasure of the wearer, without departing from the spirit of the invention.

In Fig. 1, the branch 6, is adapted to pass up the middle of the back of the wearer. Branch 7, passes up in front under the lapel of the coat and is connected with branch 6, at point 8. The strap 9, passes over the shoulder of the wearer, and is connected at one

end to branch 6, and its other end connects with the branch 10; said branch in its turn is connected with the metallic belt as above described. There are shown in the drawings several other branches which protect different parts of the body, the branch 11 running up the back of the head, and is adapted to keep the head and ears warm. All of these branches may be varied and other branches may be added to protect the lower limbs if necessary or desirable.

It will be observed in Figs. 2, and 3, that the inner sides of the parts 2, of the belt are provided with the inwardly extending recesses 12, which are constructed as shown in Fig. 3. These recesses are adapted to be near the body and they give the belt more radiating or heating surface, and are thus adapted to convey more heat to the body, than if they were mere flat surfaces.

The belt 1, is connected by the hollow tube 30, with a suitable heating apparatus; one which is adapted to send heat through the said tube and from the said tube the heat will enter the belt and pass through the branches of the coat or jacket and keep the body of the wearer warm.

In operation in a vehicle the heating apparatus can be placed under the seat and the coat or jacket can be worn by the driver or traveler.

There are any number of ways in which the apparatus may be fixed to protect persons exposed to the cold weather, and it is not necessary here to state the many different ways. The object of the invention is to supply warm oxygen to the body in preference to air which has passed through fire and had the oxygen taken out.

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

1. In combination with a suitable heating apparatus, the jacket or coat, consisting of a flexibly jointed metallic belt having extending from it suitable branches, said branches and belt being hollow, and a suitable hollow connection between the belt and heating apparatus, the said coat or jacket adapted to impart heat to the body of the wearer, substantially as shown and described.



2. In combination with a suitable heating apparatus, the jacket or coat, consisting of a flexibly jointed metallic hollow belt having extending from it suitable hollow branches, 5 said belt also being provided with the parts 2, having the inwardly extending recesses, the said belt being connected by a hollow tube with the heating apparatus, the said coat or jacket adapted to impart heat to the body of the wearer, substantially as shown and described.

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

ROBERT HENRY YEOMAN.

Witnesses:

A. B. DALE,  
JOHN E. MILLER.