

(No Model.)

R. DAESCHNER.
PORTABLE DARK ROOM.

No. 561,568.

Patented June 9, 1896.

Fig. 1.



Fig. 3.

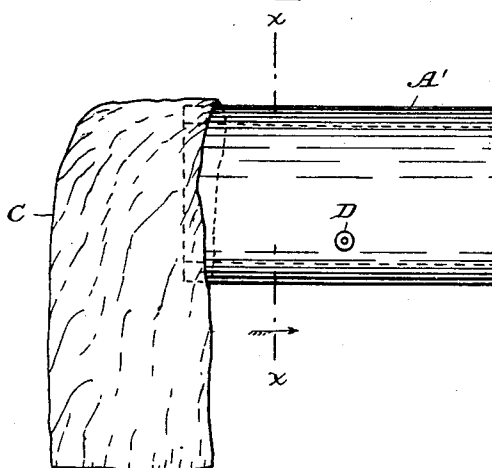


Fig. 2.

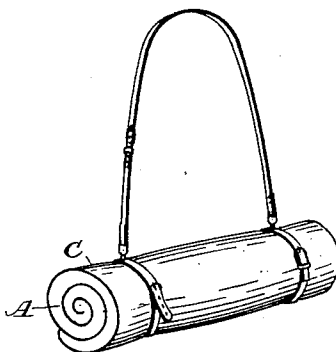
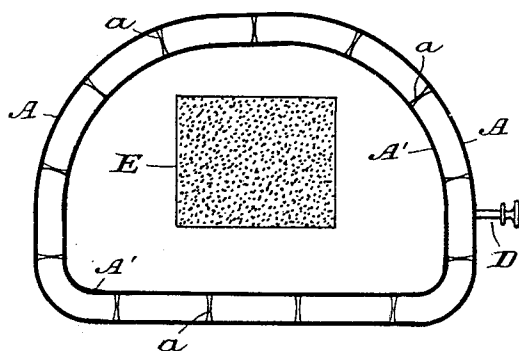


Fig. 4.

WITNESSES:

E. B. Bolton

Otto Munk

INVENTOR

Rudolf Daeschner

BY

Richard A.

ATTORNEYS

UNITED STATES PATENT OFFICE.

RUDOLF DAESCHNER, OF COLOGNE, GERMANY.

PORTABLE DARK ROOM.

SPECIFICATION forming part of Letters Patent No. 561,568, dated June 9, 1896.

Application filed April 2, 1896. Serial No. 535,936. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF DAESCHNER, a subject of the King of Prussia, German Emperor, and a resident of Cologne, in Rhenish Prussia and Kingdom of Prussia, Germany, have invented certain new and useful Improvements in Portable Dark Rooms, of which the following is a specification.

My invention has for its object to provide a dark room that is readily portable, that may be carried by the user upon his person in an uninflated or knockdown condition, and that when it is desired to use the same can be readily inflated for use either at home or in any locality where the operator may chance to be, and that may also be used for the purpose of developing negatives when so desired.

It is well known that photographers who do outside work, especially those who travel for business purposes, as well as the countless army of amateurs, both those that use dry-plates and those that use collodion films, have usually been obliged to carry with them as many dry-plates or films as they wished for the purpose of making pictures, because of the difficulty they have had in renewing their supplies and finding dark rooms for changing the plates and films and for developing their negatives, and that in many cases this has resulted in the photographer, especially those who have used dry-plates, taking very many less pictures than they wished, because they have been obliged to limit the number of plates on account of their great weight. This has been particularly the case with those who have made extensive and expensive journeys. On the other hand, plates which had been once exposed could not be renewed, and in case the mechanism of the camera refused to work no further pictures could be taken because no dark room was obtainable, or at best obtainable only under great difficulties.

Many attempts have been made in the past to construct an apparatus which would permit the operator to exchange plates or films without using a permanent dark room; but so far as I am aware none of these apparati has proven successful, either because they have been too complicated, or too heavy, or too expensive, or for the further reason that

they have been made so small that they could only be used for very small plates, if they could be used at all.

All the above-named disadvantages are overcome in the present invention, in which an air-bag or casing is provided, which when not in use can be rolled up into a small space and easily carried upon the person of the user by means of a strap, or be easily packed and carried in the valise or trunk. At the same time, when it is desired to use it it can be easily inflated with air, when it forms a perfectly staple dark room in which the photographer can work easily and accomplish any of the results that may be reached in a permanent dark room.

In the drawings which form a part of this specification and in which corresponding letters of reference indicate similar parts wherever they occur, Figure 1 is a perspective view showing my improved dark room inflated and in use. Fig. 2 is a central vertical section taken on the line *xx* of Fig. 3, looking in the direction of the arrow. Fig. 3 is a side elevation. Fig. 4 is a side elevation showing the portable dark room uninflated and in shape for transportation.

A A' is the dark room, which is made with double walls of any suitable air-tight materials. I prefer to use rubber cloth, as this may be made very light and excludes the air perfectly. The double walls A A' are supported by longitudinal supports *a*, which are also preferably made of rubber cloth. The casing or dark room is provided at one end with a curtain C, preferably of some textile fabric, such as heavy cloth, preferably black as to color, and at the other or outer end I insert a window E, of red or green material, which must be of such a nature that it does not crack or break when the casing or dark room is rolled up to admit sufficient light for the operator to work, while at the same time the actinic rays are excluded. The curtain C may be of oiled paper or celluloid or of any material that will answer the above purpose and fulfil these requirements.

Upon the side of the casing is provided a suitable air-valve D, which communicates from the outside to the space between the

walls A A'. By the use of this valve D air may be forced in between the walls A A', so as to inflate the casing, or, when desired, the air may be withdrawn from between the walls A A' when it is desired to prepare the dark room for the purposes of transportation.

All the chambers formed by the double walls A A' and the longitudinal partitions *a* should be intercommunicating, so that the air may pass from the valve D through all of the chambers, which may be accomplished by either making the partitions *a* a little shorter than the walls A A' at one or both ends or by providing suitable openings in the longitudinal partitions *a*.

In carrying my invention into operation the casing or dark chamber is first inflated by forcing the air through the valve D between the double walls A A'. Sufficient air should be forced in to make the casing or dark chamber quite rigid. The valve is then closed and the operator then passes the curtain C up, passing it over his head and shoulders. The curtain may, if necessary, be fastened around his waist or hips by means of a tape or cord. The whole of the upper part of the body of the operator being within the casing or dark room he is naturally free to move his hands and arms for the purpose of changing plates or films, while sufficient light is admitted through the window E in the end of the casing to permit him to see well. At the same time the actinic rays are excluded. When the operator finishes his work, the air is removed by opening the valve D, and the entire apparatus may then be rolled up and is ready for transportation.

After the bag is inflated, as hereinbefore stated, it can be placed in position anywhere, either upon the ground, upon a chair, or, if used in the fields or woods, upon a stone or upon any substance that will serve as a support.

The operator who is working in the interior of the bag has his head and arms free, which is a great advantage, as he can examine the state of the plate that is to be put in just as well as in the larger permanent dark room. He can test the plates and put the plates that have already been exposed into his plate-box without any danger of the nega-

tives being damaged through exposure to light.

It will be obvious that my improved portable dark room may be used either within doors or without, and that it is especially desirable for amateurs who cannot afford to construct a permanent dark room in their homes, as well as for the use of travelers who may go to places where dark rooms are unknown or not readily to be found.

It will also be obvious that the casing or dark room may be constructed of sufficient size so that phials containing the necessary chemicals may be introduced inside, and the photographer may develop his negatives in this dark room.

If desired, tubes for the admission of fresh air and the exit of vitiated air may be provided and used.

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

1. A portable dark room consisting of a structure having air-tight double walls, means for inflating said walls, and a curtain attached to one end of said structure, substantially as shown and described.

2. A portable dark room consisting of a structure having air-tight double walls, means for inflating said structure, said structure being also provided with a curtain at one end and a window at the other, substantially as shown and described.

3. A portable dark room having air-tight double walls supported by longitudinal partition-pieces, a valve for admitting and expelling the air from between said walls, and a curtain at one end of said structure.

4. A portable dark room having air-tight double walls, supported by longitudinal partition-pieces, a valve for admitting and expelling the air from between said walls, a curtain at one end of said structure, and a window at the other, substantially as shown and described.

Signed at Cologne, Rhineland and Kingdom of Prussia, this 17th day of March, A. D. 1896.

RUDOLF DAESCHNER.

Witnesses:

MARIA NAGEL,
W. H. MADDEN.