

J. DUNAND.
MILITARY HELMET.

APPLICATION FILED JUNE 5, 1917.

Patented Feb. 1, 1921.

2 SHEETS—SHEET 1.

1,366,907.

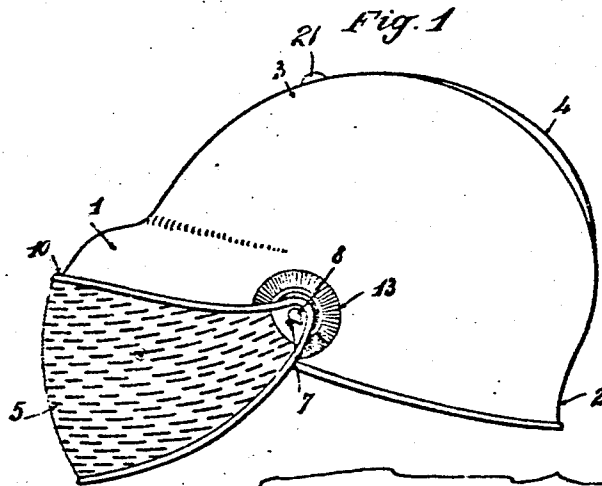


Fig. 6



Fig. 4

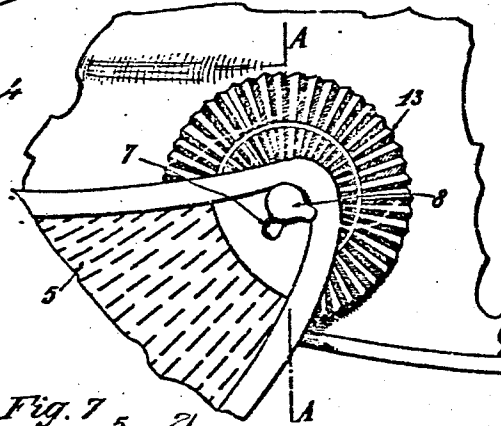
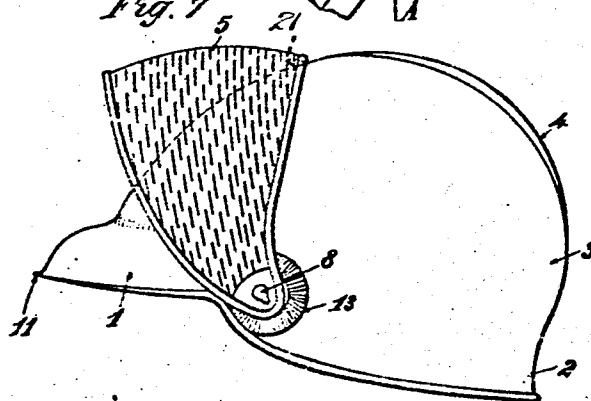


Fig. 7



Jean Dunand
Inventor

Lawrence Langue

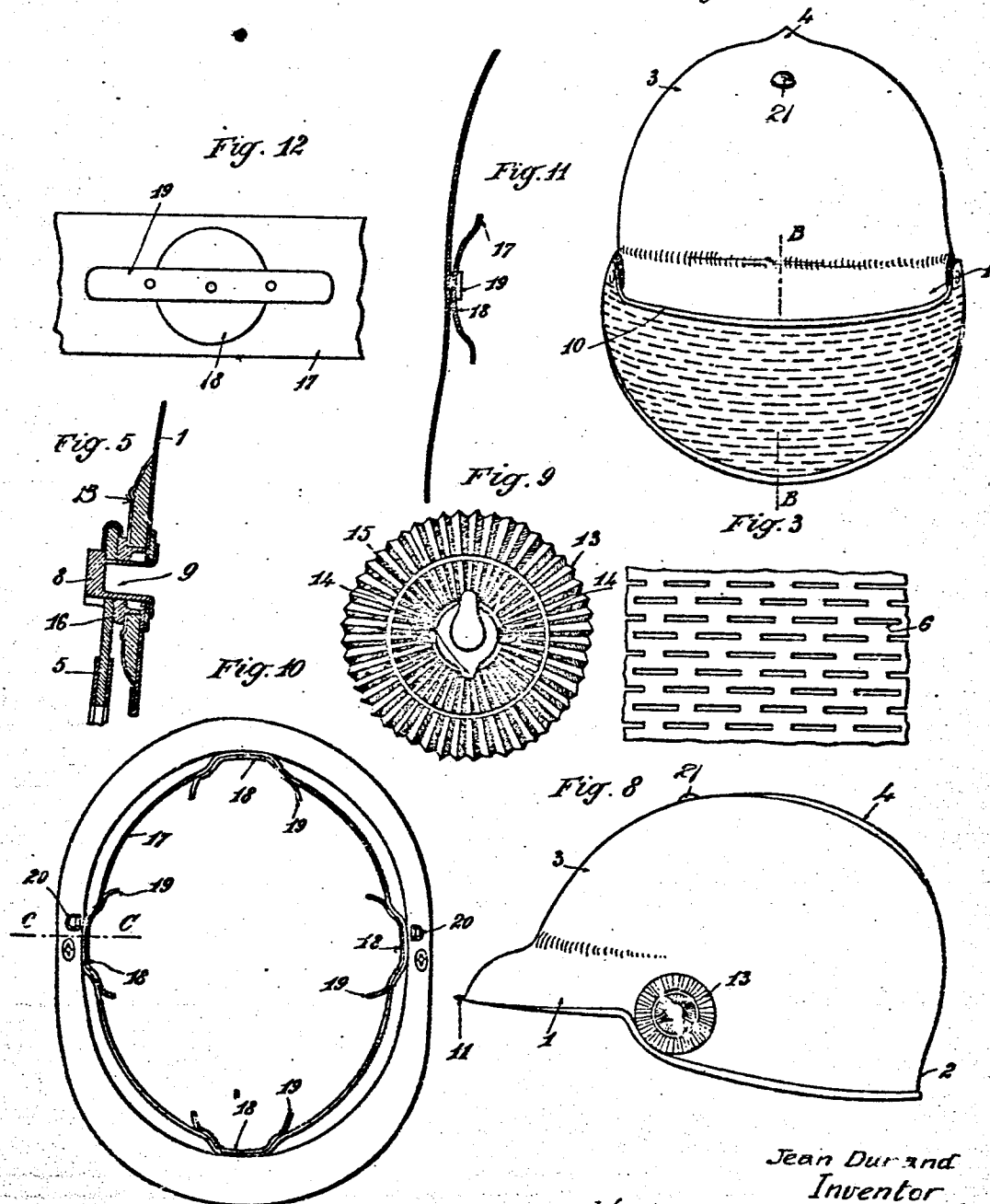
Attorney

1,366,907.

J. DUNAND.
MILITARY HELMET.
APPLICATION FILED JUNE 5, 1917.

Patented Feb. 1, 1921.

Fig. 2 2 SHEETS—SHEET 2.



Jean Dunand
Inventor

by

Laurel Langue

Attorney

UNITED STATES PATENT OFFICE.

JEAN DUNAND, OF PARIS, FRANCE

MILITARY HELMET.

1,366,907.

Specification of Letters Patent.

Patented Feb. 1, 1921.

Application filed June 5, 1917. Serial No. 173,037.

To all whom it may concern:

Be it known that I, JEAN DUNAND, citizen of the Republic of Switzerland, residing at 72 Rue Hallé, Paris, in the Republic of France, have invented new and useful Improvements in Military Helmets, of which the following is a specification.

The object of the present invention is a military helmet which is obtained by stamping out a single piece of sheet steel, and is also to be remarked for its general rounded form without angles or flat places and thus presenting no weak portions; it is designed so that projectiles will have the least effect upon it, the design being such as to favor the deflection of such projectiles.

This form also allows of protecting the ears, temples and nape of the neck without preventing the proper sight of objects or hindering the soldier in any way, even when he is engaged in firing in a reclining position. Protection of eyes and face can be obtained by the use of a removable vizor which is analogous in principle to the one described by the inventor in his French patent application No. 84564 dated July 5, 1916.

The use of a metal strip placed inside the helmet and parallel to its contour allows of obtaining a very good circulation of air about the head, and as this metal strip is flexible it allows of obtaining a good fit of the helmet upon the soldier's head in each case, and of using a single type of helmet for various standard sizes of heads.

In the accompanying drawings which are purely of an explanatory character:

Figures 1 and 2 show respectively a side and a front elevation of the helmet provided with its vizor, which is supposed to be here in the lowered position.

Fig. 3 is a detail view which shows the arrangement of the slots 6 in the vizor.

Fig. 4 shows the device used for attaching the removable vizor to the helmet.

Fig. 5 shows a cross section of this device, according to line A—A of Fig. 4.

Fig. 6 is a cross-section according to the line B—B of Fig. 2.

Fig. 7 shows a side elevation of the helmet, with the vizor supposed to be in the raised position.

Fig. 8 shows the same helmet without the vizor.

Fig. 9 shows one of the two rosettes used upon the helmet, on a larger scale.

Fig. 10 is a view of the helmet from below.

Fig. 11 is a partial cross-section of the helmet according to the line C—C of Fig. 10, showing the inside metal strip which fits upon the head.

Fig. 12 is a partial view of this strip in front elevation.

As indicated in the drawing, the helmet is obtained by stamping from a single piece of sheet steel, and it has a general rounded form. The suppression of all joined pieces does away with any weak places in the helmet such as are found in some of the existing types. The rims 1 and 2 terminate the main body or cap of the helmet which has no angles nor flat surfaces such as would favor the action of projectiles. The whole is designed so as to facilitate the deviation of projectiles. On the top part is the crest 4 which is made in one piece with the cap and has a minimum height which will be sufficient to produce the required stiffness in the rounded cap. The helmet protects the ears, temples and nape of the neck. The back rim 2 has its edge slightly curved toward the outside so as not to incommode the soldier when firing in the reclining position. As the rim 1 does not reach as low down as the rim 2, it does not interfere with the field of vision.

Protection of the eyes can be afforded by a removable vizor (Figs. 1 to 7) which is formed of a curved steel plate 5 provided with a series of small slots 6 of 1 mm. width, and spaced about 4 mm. apart between centers or longitudinal axes, and this arrangement does not prevent the proper sight of objects. The vizor is curved around the front rim 1 of the helmet and at its two ends it carries a circular hole provided with a slot 7. On each side of the helmet is fixed a button 8 provided with a heel, and in order to fix the vizor upon the helmet, it is brought into position so that the circular hole comes over the button 8 on each side and the slot 7 comes likewise over the heel of the button. By pressing on each side of the vizor, the circular holes fit down upon the button shaft or center 9 then the vizor is rotated slightly in order to move the

slots 7 away from their respective heels. In this way, the vizor is well fixed upon the helmet.

When the vizor is lowered, its edge 10 rests upon the front edge 11 of the helmet, and a rivet 12 holds it in this position. By pulling slightly upon the vizor, it can be brought into the raised position indicated in Fig. 7, in which position it is slightly forced over and maintained by a small round boss 21 formed in the helmet.

In Fig. 5, it will be seen that a removable rosette or circular badge 13 can be mounted upon the shaft 9 of the button 8 on each side, the rosette having a circular hole in the center provided with two slots 14. Upon the button shaft 9 is a bushing 16 carrying two projections 15 and the rosette is placed so as to bring its slots over these projections, then the rosette can be attached by pressing it down and turning it at a certain angle so as to fix it to the helmet as seen in Fig. 9.

Inside the helmet is mounted a flexible metal strip 17 (Figs. 10, 11 and 12) which also aids in the protection of the head. This strip is curved outward at four points as seen at 18, in order to enable it to be soldered or welded to the helmet. But all the other portions of the strip are spaced at a distance of 5 or 6 mm. from the helmet, and this disposition allows a sufficient space for a good air circulation. At 18 are soldered or welded the flexible strips 19 which serve to hold the lining on the helmet. The use of the flexible strip 17 allows of obtaining a good fit of the helmet upon the soldier's head in each case, and of using a single type of helmet for various standard sizes of heads. The neck strap is attached to the buckles or other pieces 20. A light helmet can be obtained by employing the present invention, and by the use of 0.7 mm. sheet steel, the helmet weighs only 700 grams. With 1 mm. sheet steel it weighs 950 grams. By employing a 2 mm. sheet steel, a helmet can be obtained for use in trenches which will weigh 1,900 kilogr. The present helmet and its vizor do not hinder in any way the use of a mask against asphyxiating gases. The present devices are given for the sole purpose of illustrating the invention and they can be modified in constructive details without departing from the principle of the invention.

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

1. A military helmet comprising a body of a rounded form, stamped out of a single steel sheet and having lateral parts adapted to protect the temples and the ears of the user, a rear part adapted to substantially follow the contour of, and protect, the nape of the neck and a front projecting rim

adapted to protect the eyes, the said parts and projecting rim being all connected to the body proper by curved portions.

2. A military helmet comprising a body of a rounded form, stamped out of a single steel sheet and having lateral parts adapted to protect the temples and the ears of the user, a rear part adapted to substantially follow the contour of, and protect, the nape of the neck and a front projecting rim adapted to protect the eyes, the said parts and projecting rim being all connected to the body proper by curved portions, a flexible metal strip mounted at the inside of the helmet parallel to its contour and means for fixing the said metal strip to the helmet at a certain distance from the inner surface of the same.

3. A military helmet comprising a body of a rounded form, stamped out of a single steel sheet and having lateral parts adapted to protect the temples and the ears of the user, a rear part adapted to substantially follow the contour of, and protect, the nape of the neck and a front projecting rim adapted to protect the eyes, the said parts and projecting rim being all connected to the body proper by curved portions; a vizor provided with a number of narrow parallel slots and means adapted to pivotally and removably secure the said vizor to the helmet.

4. A military helmet comprising a body of a rounded form, stamped out of a single steel sheet and having lateral parts adapted to protect the temples and the ears of the user, a rear part adapted to substantially follow the contour of, and protect, the nape of the neck and a front projecting rim adapted to protect the eyes, the said parts and projecting rim being all connected to the body proper by curved portions, a vizor provided with a number of narrow parallel slots, means adapted to pivotally and removably secure the said vizor to the helmet and means on the helmet, adapted to retain the vizor in its lowered and raised positions, respectively.

5. A military helmet comprising a body of a rounded form, stamped out of a single steel sheet and having lateral parts adapted to protect the temples and the ears of the user, a rear part adapted to substantially follow the contour of, and protect, the nape of the neck and a front projecting rim adapted to protect the eyes, the said parts and projecting rim being all connected to the body proper by curved portions, a vizor provided with a number of narrow parallel slots, removable badges arranged at the sides of the helmet and means adapted to pivotally and removably secure the said vizor to the helmet and to removably secure the badges to the helmet at the same time.

6. A military helmet comprising a body

adapted to protect the head of the user, a
bullet proof vizor provided with a number
of narrow parallel slots and means adapted
to removably secure the said vizor to the
5 helmet.

7. A military helmet comprising a body
adapted to protect the head of the user, a
bullet proof vizor provided with a number
of narrow parallel slots and means on the

helmet adapted to retain the vizor in its low- 10
ered and raised positions.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JEAN DUNAND.

Witnesses:

LOUIS MOSES,
CHAS. P. PRESSLY.