Nov. 8, 1955 J. WOJNAR 2,722,688

TOY HELMETS

Filed March 5, 1953

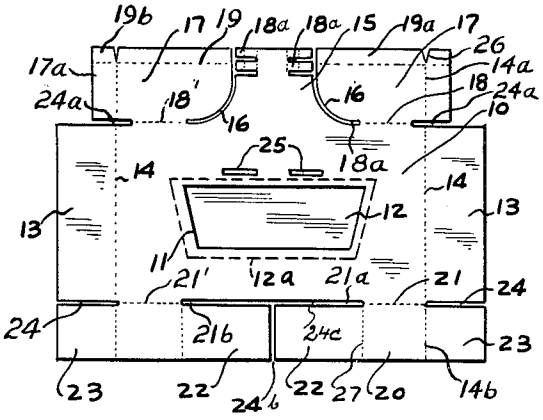


Fig. 1

Fig. 2

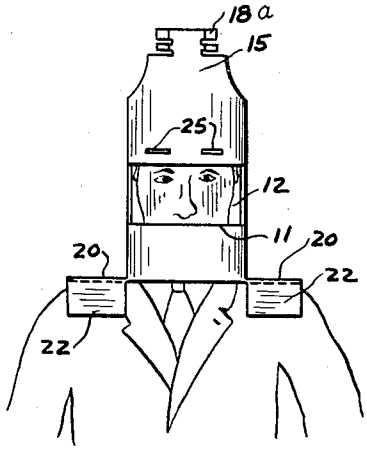
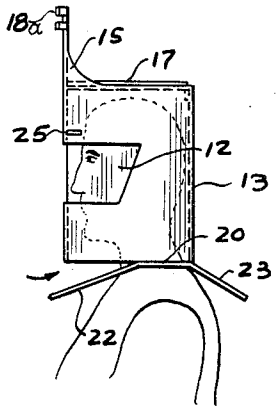


Fig. 3



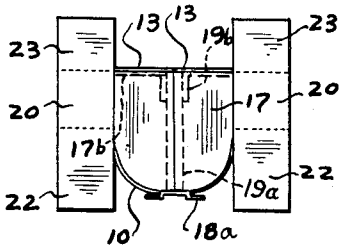


Fig. 4

INVENTOR.
JOHN J. WOJNAR.

BY Louis Klajka

ATTORNEY.

United States Patent Office

2,722,688

Patented Nov. 8, 1955

2,722,688

TOY HELMETS

John Wojnar, Detroit, Mich.

Application March 5, 1953, Serial No. 340,636

1 Claim. (Cl. 2—205)

The invention pertains to helmets having, what is known as a futuristic appearance. Helmets of this general type although not of the same structure or design, have been displayed on television by actors playing the roles of explorers of the outer spaces beyond the gravitational pull of the earth. As this type of a helmet, intended purely as a toy, would fill a large latent demand among children, I have given it a shape which will appeal to their imagination but which, because of its simplicity, will make it possible to produce these helmets quickly, in large quantities and at a very low cost. It was therefore one of my specific objects to produce a helmet out of one blank of a flexible cardboard or some other suitable material.

Another object of my improvement was to provide a helmet which at its base includes integrally connected members adapted to fit over the shoulders of the person wearing said helmet, both for the stake of stability and for the purpose of assuring free access of air into the helmet from below.

I shall now describe said helmet with reference to the accompanying drawings, in which:

Fig. 1 is a plan elevational view of a cardboard blank properly cut and creased to be formed into a complete helmet;

Fig. 2 is a front elevational view of the helmet in its set up condition;

Fig. 3 is a side elevational view of said helmet;

Fig. 4 is a top elevational view thereof.

Similar numerals refer to similar parts throughout the several views.

The cardboard blank out of which the helmet is made is shown in Fig. 1. It includes a central, substantially-rectangular area **10** which is defined on the sides by lines of creases **14**, along the bottom by slits and creases along straight lines **21** and **21'**, and at the top by lines of creases **18** and **18'** extending parallel to said lines **21** and **21'** at the bottom.

It will be understood that all creases which will be mentioned in the course of this specification indicate a weakening of the fabric of the blank along the lines of said creases in order that the blank may be bent, folded, or deflected along said lines from the adjoining part or parts of the blank.

It will be also understood that a description of the blank to one side of a vertical imaginary line bisecting the blank will apply also to the other side thereof.

That portion of the blank which extends on each side of the blank from the respective line of crease **14** to the outer edge of said blank forms a flap **13**. Each flap is defined by its lower end by a slit **24** and at the top by a slit **24*a***, the slits being parallel to each other.

It will be noted that the crease **18** is but an extension of the slit **24*a***, and the said crease runs from the inner end of said slit to a point **18*a***, the latter being spaced from said central vertical line. At this point the crease **18** runs into an arcuate slit **16** curving upwardly. The

slit defines an arc of approximately 90 degrees, and extends up to the upper edge of the blank. The portion **15** of the blank above the rectangular central area **10** which is flanked by two such arcuate slits **16** forms what will be called a peak of the helmet.

The portion of the blank which extends laterally from the arcuate slit **16** and is defined at the bottom by the line of crease **18** and **18'** and the slit **24*a*** is marked **17** and is intended to form a part of the top of the helmet. The portion or member **17** is provided with a crease **19** running parallel to its top edge, the part between said crease and the upper edge of the blank forming a tab **19*a***. A vertical crease **14*a***, parallel to the side edge **17*a*** of member **17**, demarks a side tab **17*b*** of said member **17**.

In addition thereto, the top edge of said tab **19*a*** is provided with a vertical notch **26**, the notch being alined with said crease **14*a***. Located at the corner outwardly of said notch **26** is a corner tab **19*b***, defined at its lower side by an extension of crease **19**.

As a means of ornamentation, said upright peak **15** is provided with a plurality of lateral slots **18*a*** on each side thereof.

Coming down to the lines of demarcation of the central area **10** of the blank on its lower side, it will be noted that the line of crease **21** on each side of the central vertical line bisecting the blank runs from the slit **24** to a point **21*a*** spaced from the central vertical line; that from said point to a point **21*b*** equally spaced from the central line on the opposite side thereof said area **10** is defined by a horizontal slit **24*c*** which runs into a crease **21** and a slit **24** alined therewith.

Extending vertically from the horizontal slit **24*c*** to the lower edge of the blank along the imaginary central vertical line is slit **24*b***. Thus, a slit **24**, the crease **21**, a part of the slit **24*c***, and the vertical slit **24*b*** serve, in part, as the lines of demarcation of an oblong rectangular strip which is subdivided by a vertical crease line **14*b*** and a vertical line **27** into three adjoining areas, namely, the midportion or board **20**, the inner end portion **22**, and the outer end portion **23**.

The central area **10** of the blank is provided in its midportion with an oblong horizontally-extending opening **11** which has the form of a trapezoid. A thin sheet of transparent plastic **12**, glued to the rear side of the blank along the edges of the opening, converts the opening into a window in the setup helmet. Two horizontal slots **25** disposed right over the upper edge of aperture **11** serve as ventilating ports for the helmet.

It is the blank thus described that may be formed into a helmet. For this purpose the side portions of the blank are bent rearwardly till the outer edge of one flap **13** will meet the outer edge of the opposite flap **13**, the two flaps being placed in the same plane. To retain them in this position, members **17** at the top of the blank are deflected therefrom along the creases **18** and **18'** to a horizontal position at right angle to the plane of the flaps **13** to form the top of the hat as shown in Fig. 4.

Tabs **19*a*** are turned down from their horizontal positions of the respective members **17**, and, being in a longitudinal abutment with each other, as shown in dotted lines in Fig. 4, are glued or otherwise secured to each other.

The side tab **17*b*** of each member **17** is bent downwardly to be glued to the top portion to the back surface of the top portion of the respective flap **13**, while the corner tab **19*b*** is tucked inside for abutment with tab **19*a***, as shown in the drawings, in which position it may be glued or otherwise secured thereto.

When the blank is so formed into a helmet, the two oblong horizontally-disposed strips at the lower part of the blank are bent outwardly from the central area **10** thereof, each being bent along the crease line **21** till each of them is disposed horizontally at right angle to the body

of the helmet. Thereupon, the two end portions, **22** and **23**, of the strip are deflected downwardly, as shown in Fig. 3. In this position the mid-portion **20** of the strip is designed to fit over the top of the shoulder of the wearer of the helmet.

The straps will keep the helmet upright, permitting air to enter the helmet from below as shown by an arrow, while the ventilating slots **25** will permit the air to escape from the helmet outwardly. This is an important feature as otherwise the moisture contained in the exhaled air would cloud the transparent plastic pane **12**.

It will be understood that some minor changes may be made in the structure of the helmet described by me, without departing from the inventive idea inclosed herein. What I, therefore, wish to claim, is as follows:

A substantially rectangular blank of cardboard adapted to be bent upon itself into a substantially tubular shape to form a helmet, the blank including a central, substantially-rectangular area, a peaked portion extending upwardly from said area, a horizontal member on each side of the peak portion, the member being severed therefrom by an arcuate slit and being defined along its lower side by a horizontal crease, each of said horizontal members being adapted to be bent rearwardly to a horizontal position to form a part of the top of the helmet back of said peaked portion, a side flap on each side of the central rectangular area, the outer edges of the flaps being adapted to form the rear portion of the helmet, two strips at the lower portion of the blank, the strips being alined horizontally, each including a mid-portion connected to the central area of the blank and adapted to be creased along the line of connection, an outer end portion severed at the top by a slit from the side flap above, and an inner end portion severed at the top by a slit from said central area and by a vertical slit separating it from the inner end portion of the other strip, each of the strips being adapted to be bent outwardly from the body of the blank when in its tubular form to fit over the top of one shoulder of the wearer of the helmet, the strips serving to hold up the helmet in its vertical position, the central area of the blank having an opening therein to serve as a window.

References Cited in the file of this patent

UNITED STATES PATENTS

766,419	Breck et al.	Aug. 8, 1904
1,247,415	Lattimore	Nov. 20, 1917
1,856,879	Lufkin	May 3, 1932
1,928,238	Willson	Sept. 26, 1933
2,000,242	Manning	May 7, 1935
2,083,000	Bennard	June 8, 1937