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(54) **BAG WITH GUSSET OVERLAP OF TOP**

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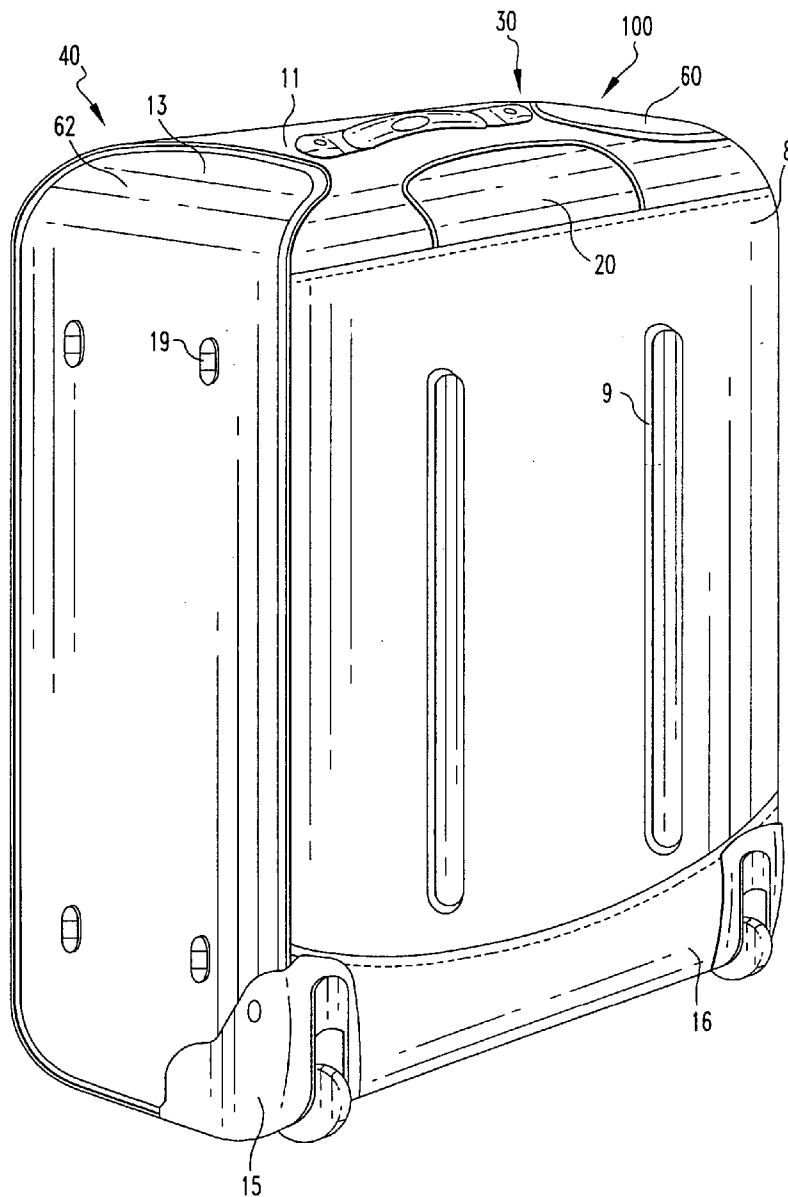
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(57) **ABSTRACT**

A carrying bag having a frame having a top. The bag includes a skin for the frame. The skin has a top gusset, and a right side gusset and a left side gusset which extend onto and overlap the frame top so there is not a 90 degree corner formed between the top and the right and left side gussets. A method for carrying a bag.

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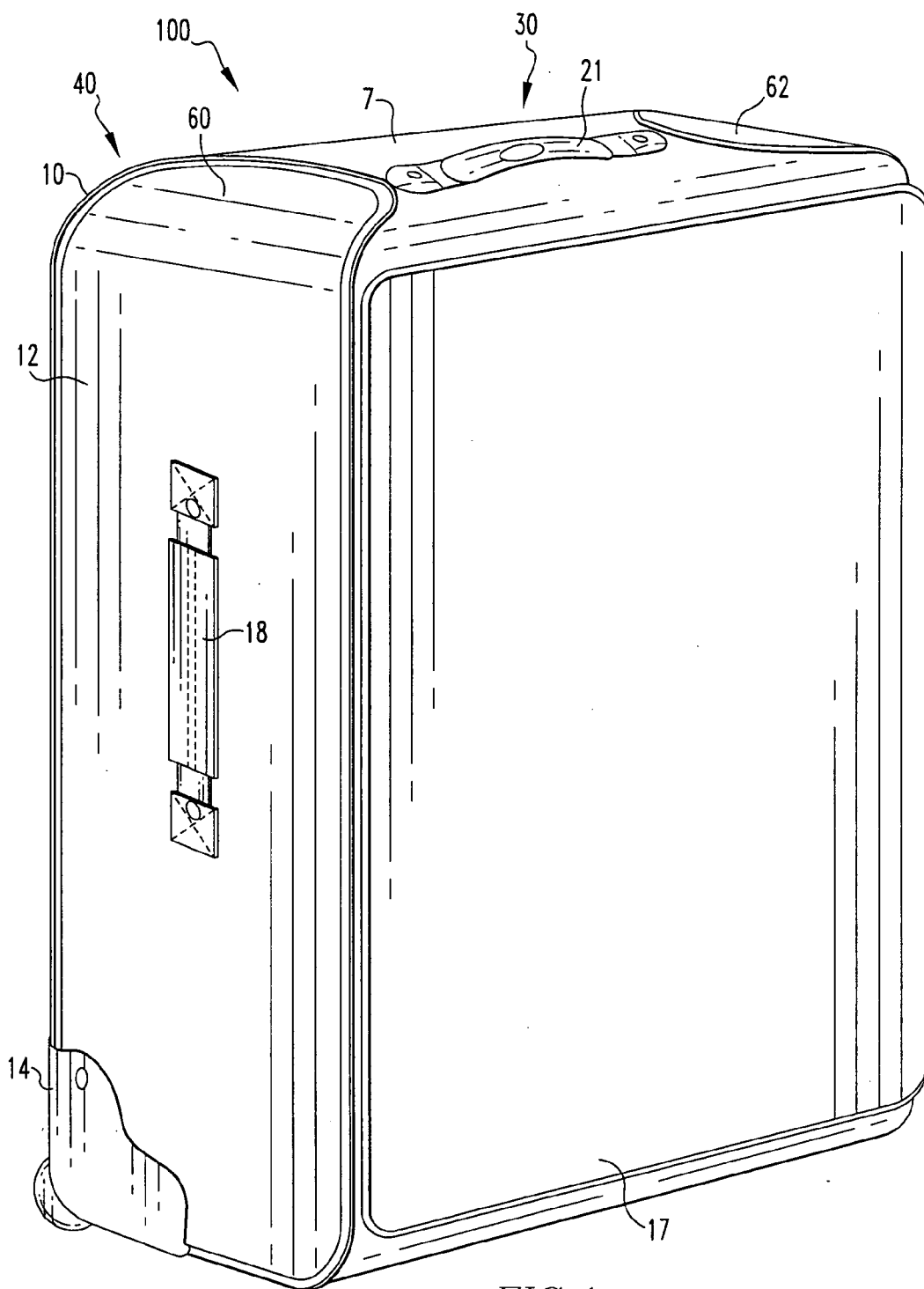
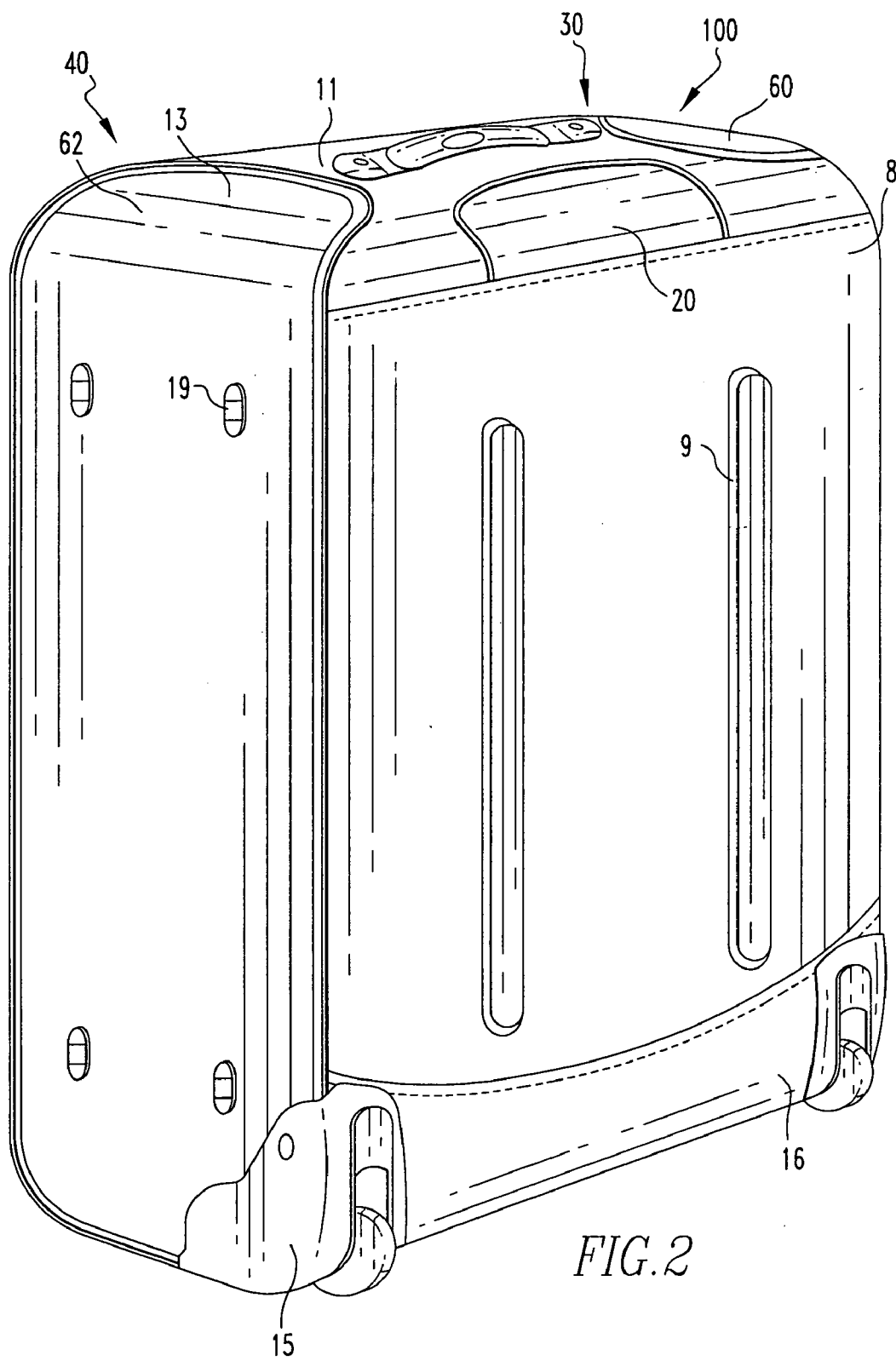


FIG. 1



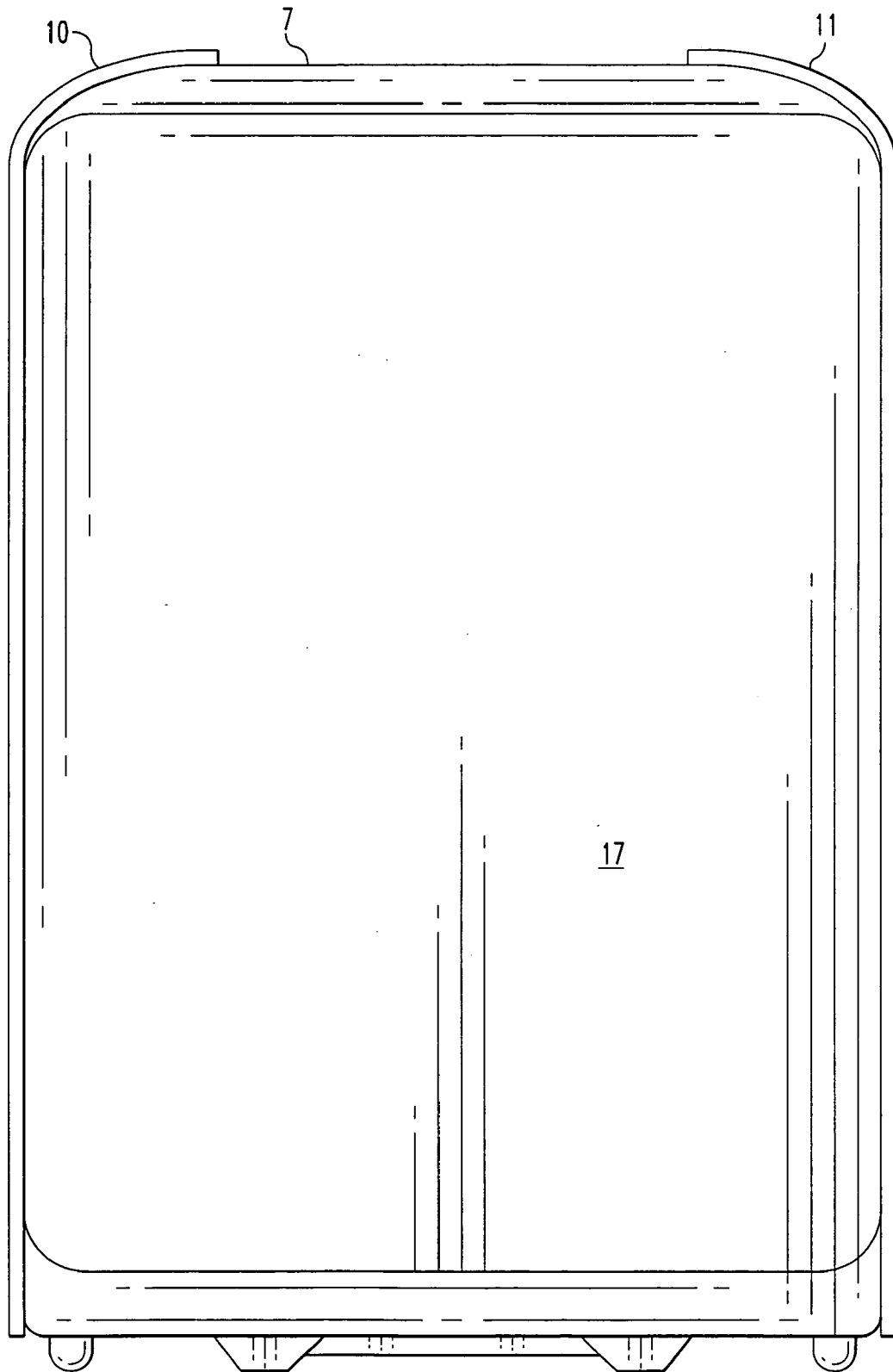


FIG. 3

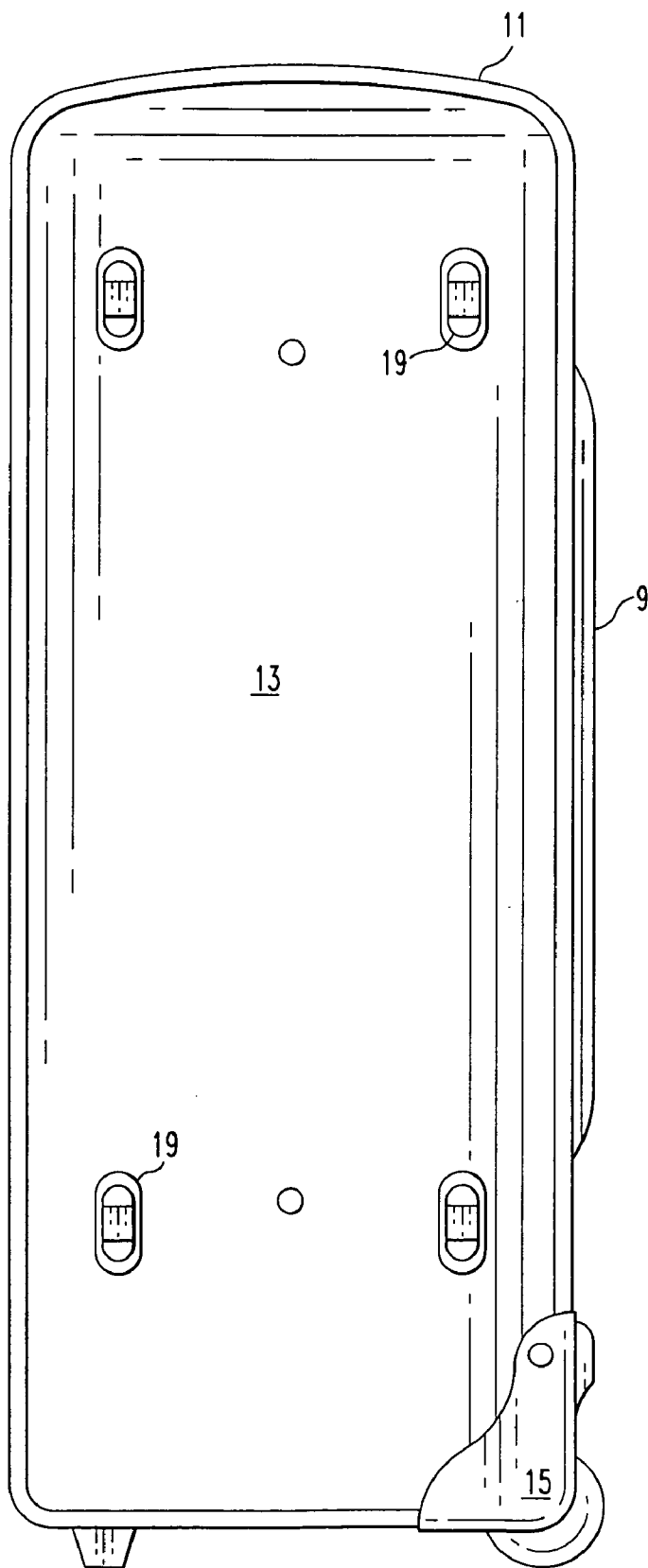


FIG. 4

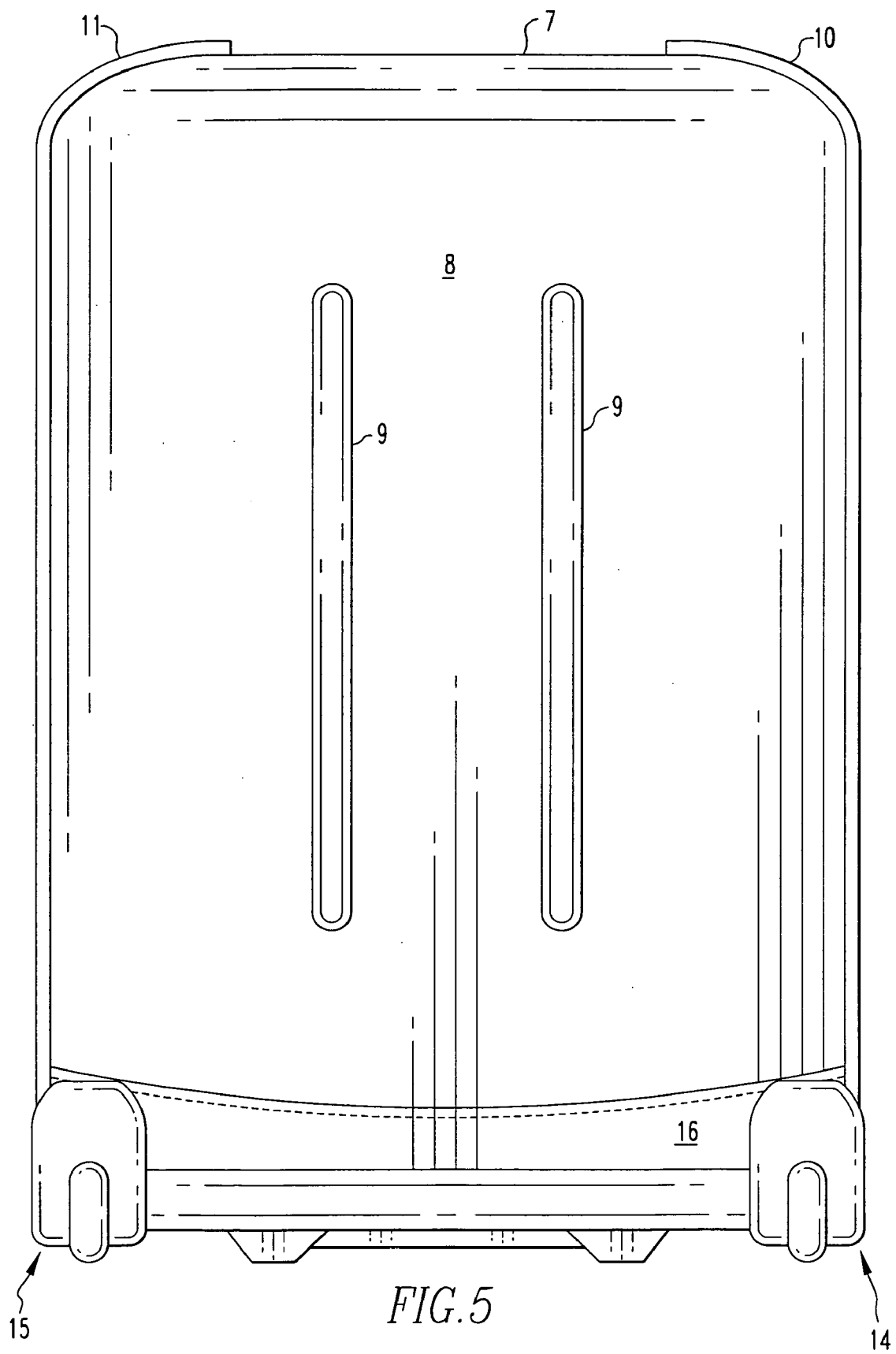


FIG. 5

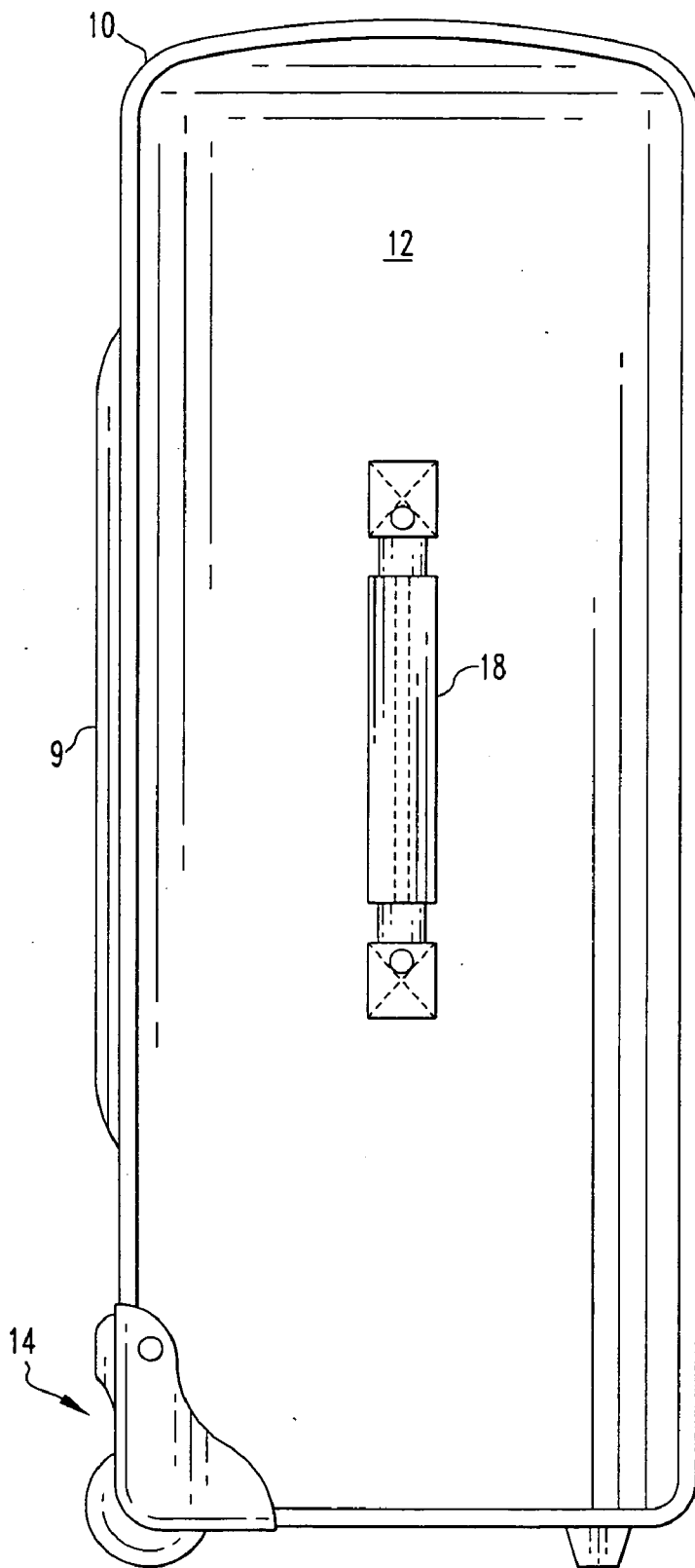
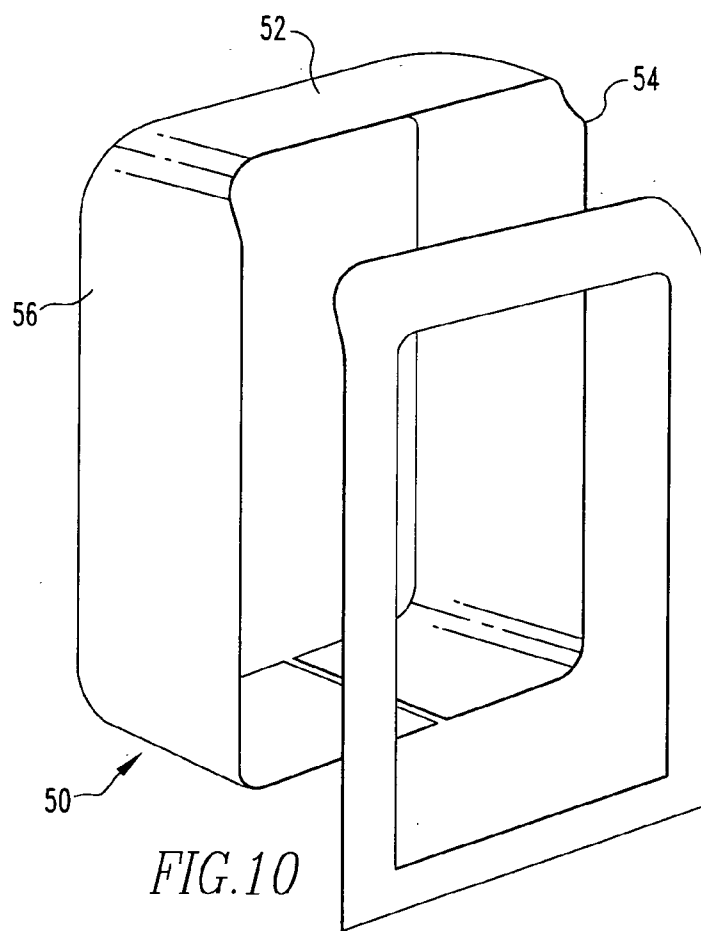
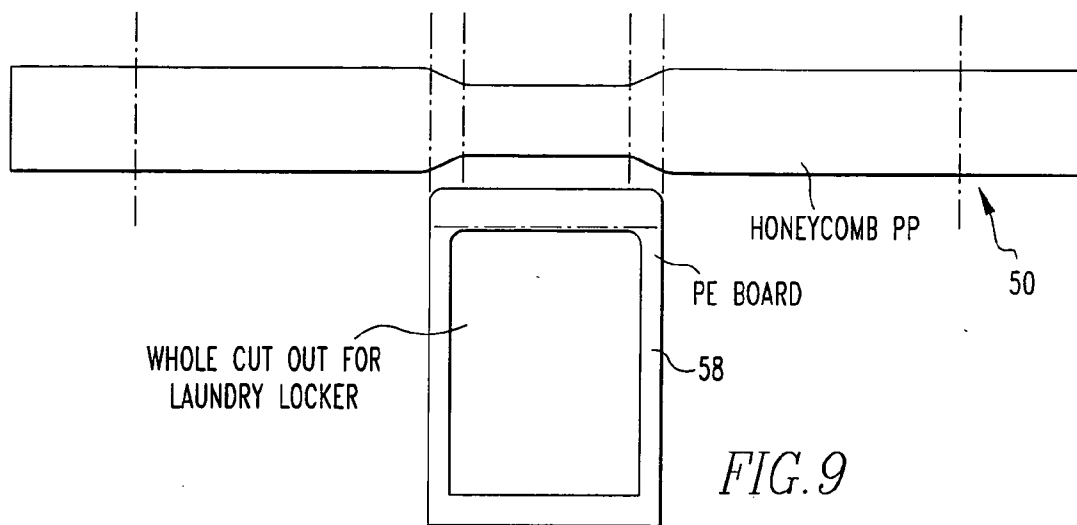
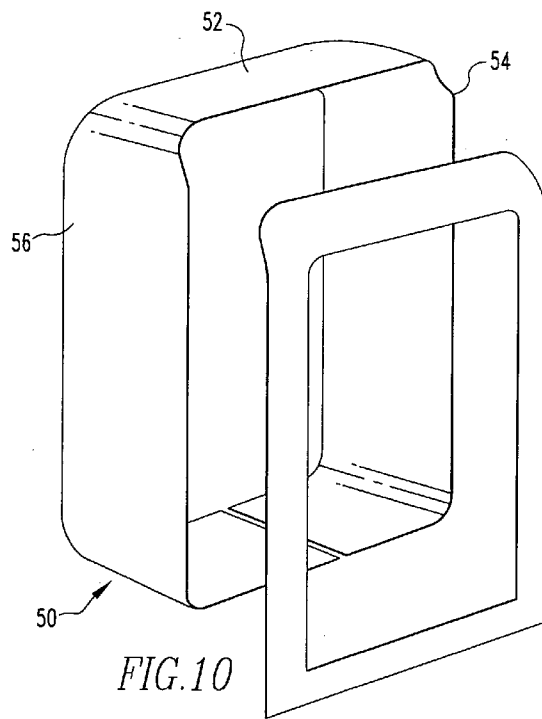
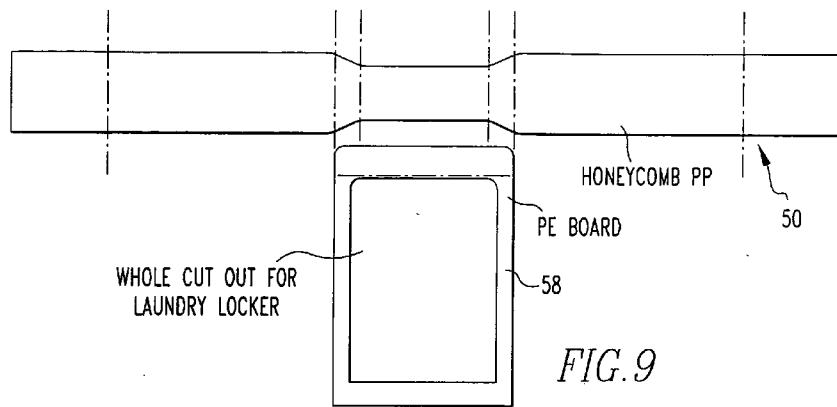


FIG. 6



8/8



BAG WITH GUSSET OVERLAP OF TOP

FIELD OF THE INVENTION

[0001] The present invention is related to bags such as luggage and suitcases. More specifically, the present invention is related to the side gusset construction of travel bags such as upright Pullmans or various suiters and garment bags.

BACKGROUND OF THE INVENTION

[0002] Luggage is commonly manufactured to have corners of 90 degree angles. These corners, because of their abrupt angle, receive significant blows and experience abrasion during handling that over time could damage the luggage.

SUMMARY OF THE INVENTION

[0003] The present invention pertains to a carrying bag. The bag comprises a frame having a frame top, a frame right side and a frame left side. The bag comprises a top gusset having a top right side and a top left side. The bag comprises a front gusset face attached to the top. The bag comprises a back gusset face attached to the top. The bag comprises a right side gusset having a perimeter with piping. The right side gusset has a right gusset top. The perimeter of the right gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the right side gusset. The bag comprises a left side gusset having a perimeter with piping. The left side gusset has a left gusset top. The perimeter of the left gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the left side gusset. The bag comprises a bottom gusset attached to the front gusset face, back gusset face, right side gusset and left side gusset. The top gusset, front gusset face, back gusset face, right side gusset, left side gusset and the bottom gusset together forming a skin that envelops the frame, the right gusset top extending onto and overlapping the frame top, the left gusset top extending onto and overlapping the frame top.

[0004] The present invention pertains to a carrying bag. The bag comprises a frame having a top. The bag comprises a skin for the frame. The skin has a top gusset, and a right side gusset and a left side gusset which extend onto and overlap the frame top so there is not a 90 degree corner formed between the top and the right and left side gussets.

[0005] The present invention pertains to a method for carrying a bag. The method comprises the steps of lifting the bag by a top handle attached to a top gusset of the bag. The top gusset of the bag comprising a top right side and a top left side. The bag comprises a front gusset face attached to the top. The bag comprises a back gusset face attached to the top. The bag comprises a right side gusset having a perimeter with piping. The right side gusset has a right gusset top. The perimeter of the right gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the right side gusset. The bag comprises a left side gusset having a perimeter with piping. The left side gusset has a left gusset top. The perimeter of the left gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and

the left side gusset. The bag comprises a bottom gusset attached to the front gusset face, back gusset face, right side gusset and left side gusset. The top gusset, front gusset face, back gusset face, right side gusset, left side gusset and the bottom gusset together forming a skin that envelops the frame, the right gusset top extending onto and overlapping the frame top, the left gusset top extending onto and overlapping the frame top. There is the step of moving the bag.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] In the accompanying drawings, the preferred embodiment of the invention and preferred methods of practicing the invention are illustrated in which:

[0007] **FIG. 1** is a front perspective view of a bag of the present invention.

[0008] **FIG. 2** is a back perspective view of the bag.

[0009] **FIG. 3** is a front elevational view of the bag.

[0010] **FIG. 4** is a left side elevational view of the bag.

[0011] **FIG. 5** is a back elevational view of the bag.

[0012] **FIG. 6** is a right side elevational view of the bag.

[0013] **FIG. 7** is the top elevational view of the bag.

[0014] **FIG. 8** is the bottom elevational view of the bag.

[0015] **FIG. 9** is a front view of the components of the frame.

[0016] **FIG. 10** is a perspective view of the components of the frame.

DETAILED DESCRIPTION

[0017] Referring now to the drawings wherein like reference numerals refer to similar or identical parts throughout the several views, and more specifically to **FIGS. 1, 2 and 10** thereof, there is shown a carrying bag **100**. The bag **100** comprises a frame **50** having a frame top **52**, a frame right side **54** and a frame left side **56**. The bag **100** comprises a top gusset **7** having a top right side and a top left side. The bag **100** comprises a front gusset face **17** attached to the top gusset **7**. The bag **100** comprises a back gusset face **8** attached to the top gusset **7**. The bag **100** comprises a right side gusset **12** having a perimeter with piping. The right side gusset **12** has a right gusset top **60**. The perimeter of the right gusset top **60** attached to the top gusset **7**, the front gusset face **17** and the back gusset face **8** so there is not a 90 degree corner formed between the top gusset **7** and the right side gusset **12**. The bag **100** comprises a left side gusset **13** having a perimeter with piping. The left side gusset **13** has a left gusset top **62**. The perimeter of the left gusset top **62** attached to the top gusset **7**, the front gusset face **17** and the back gusset face **8** so there is not a 90 degree corner formed between the top gusset **7** and the left side gusset **13**. The bag **100** comprises a bottom gusset attached to the front gusset face **17**, back gusset face **8**, right side gusset **12** and left side gusset **13**. The top gusset **7**, front gusset face **17**, back gusset face **8**, right side gusset **12**, left side gusset **13** and the bottom gusset together forming a skin **40** that envelops the frame **50**, the right gusset top **60** extending onto and overlapping the

frame top **52**, the left gusset top **62** extending onto and overlapping the frame top **52**.

[0018] Referring also to **FIGS. 3-8**, the bag **100** preferably includes a top handle attached to the top gusset **7**. Preferably, the bag **100** includes a side handle attached to the right gusset side. The bag **100** preferably includes a right side wheel **14** and a left side wheel **15** attached to the back gusset face **8**. Preferably, the bag **100** includes side feet **19** attached to the left side gusset **13**. The bag **100** preferably includes a moisture barrier **16** attached to the back gusset face **8**. Preferably, the bag **100** includes a skid bar **9** attached to the moisture barrier **16**.

[0019] The present invention pertains to a method for carrying a bag **100**. The method comprises the steps of lifting the bag **100** by a top handle attached to a top gusset **7** of the bag **100**. The top gusset **7** of the bag **100** comprising a top right side and a top left side. The bag **100** comprises a front gusset face **17** attached to the top gusset **7**. The bag **100** comprises a back gusset face **8** attached to the top gusset **7**. The bag **100** comprises a right side gusset **12** having a perimeter with piping. The right side gusset **12** has a right gusset top **60**. The perimeter of the right gusset top **60** attached to the top gusset **7**, the front gusset face **17** and the back gusset face **8** so there is not a 90 degree corner formed between the top gusset **7** and the right side gusset **12**. The bag **100** comprises a left side gusset **13** having a perimeter with piping. The left side gusset **13** has a left gusset top **62**. The perimeter of the left gusset top **62** attached to the top gusset **7**, the front gusset face **17** and the back gusset face **8** so there is not a 90 degree corner formed between the top gusset **7** and the left side gusset **13**. The bag **100** comprises a bottom gusset attached to the front gusset face **17**, back gusset face **8**, right side gusset **12** and left side gusset **13**. The top gusset **7**, front gusset face **17**, back gusset face **8**, right side gusset **12**, left side gusset **13** and the bottom gusset together forming a skin **40** that envelops the frame **50**, the right gusset top **60** extending onto and overlapping the frame top **52**, the left gusset top **62** extending onto and overlapping the frame top **52**. There is the step of moving the bag **100**.

[0020] The present invention pertains to a carrying bag **100**. The bag **100** comprises a frame **50** having a top gusset **7**. The bag **100** comprises a skin **40** for the frame **50**. The skin **40** has a top gusset **7**, and a right side gusset **12** and a left side gusset **13** which extend onto and overlap the frame top **52** so there is not a 90 degree corner formed between the top gusset **7** and the right and left side gussets **12**, **13**.

[0021] In the operation of the invention, the bag **100** differs from other cut-and-sew gusset constructions on the market with its unique contoured construction. The side gusset is constructed into the top gusset **7** of the bag **100** as most gussets are separated from the top gusset **7** of the bag **100**. Traditional/longbound construction as well as side-bound construction use two or three pieces of material held together, respectively, with piping and separated into top gusset **7** and left and right side. This new gusset construction also uses three pieces of material help together by piping but incorporates the top gusset **7** with the two side pieces. The bag **100** deflects abrasion and wear at the corners better than traditional cases with their 90 degree corners. **FIGS. 7 and 8** show both front and back perspective views, respectively.

The back section of material of back gusset face **8** is wrapped around to the top gusset **7** of the bag **100** to connect with piping **10**, piping **11**, right side gusset **12** and left side gusset **13**. Top gusset **7** can also be connected to back gusset face **8** if this is not already one whole piece. Handle cup **20** is an exterior locking handle than top gusset **7** and back gusset face **8** will be all one piece. If handle cup **20** is an interior zip-away handle cup (as shown), then top gusset **7** and back gusset face **8** are separate. Piping **10** and piping **11** is stitched to hold top gusset **7** together with right side gusset **12** and left side gusset **13**. Piping **10** and piping **11** can be comprised of PVC piping or PVC piping covered in the main material of the bag **100**. Right side gusset **12** and left side gusset **13** are the side gussets that make this design different from all bags on the market currently. Right side wheel **14** is riveted to back gusset face **8** and right side gusset **12**. Left side wheel **15** is riveted to back gusset face **8** and left side gusset **13**. PVC moisture barrier **16** is sewn to back gusset face **8** and is held in place with piping **10** and piping **11**. Front gusset face **17** is held in with piping **10** and piping **11** and is sewn to top gusset **7**. Side carry handle **18** is riveted to right side gusset **12**. Side feet **19** are sewn on to left side gusset **13**. PVC skid bar **9** can be sewn to the top gusset **7** and back gusset face **8**. Top carry handle **21** is riveted or sewn on to top gusset **7**.

[0022] In the manufacture of the bag **100**, the gusset is sewn together from three different pieces. These pieces are the top/back, the right side and the left side. The pieces are all held together with piping. The piping can either be PVC or PVC covered in main material. The material can be polyester, nylon, cotton, poly/nylon blend, poly vinyl chloride or poly propylene.

[0023] The sides of the gusset are cut in a way that they integrate into the top gusset **7** of the bag **100** and actually become part of the top gusset **7**. After these pieces are sewn together, the skin **40** is wrapped around a frame **50**. This frame **50** can either be Honeycomb ABS, PP, PVC or a metal frame with PE board **58** reinforcements, as shown in **FIGS. 9 and 10**. This frame **50** is what gives the bag **100** its structure and the skin **40** is just a covering that does not give any structural aid.

[0024] Although the invention has been described in detail in the foregoing embodiments for the purpose of illustration, it is to be understood that such detail is solely for that purpose and that variations can be made therein by those skilled in the art without departing from the spirit and scope of the invention except as it may be described by the following claims.

What is claimed is:

1. A carrying bag comprising:

- a frame having a frame top, a frame right side and a frame left side;
- a top gusset having a top right side and a top left side;
- a front gusset face attached to the top gusset;
- a back gusset face attached to the top gusset;
- a right side gusset having a perimeter with piping, the right side gusset having a right gusset top, the perimeter of the right gusset top attached to the top gusset, the

front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the right side gusset;

a left side gusset having a perimeter with piping, the left side gusset having a left gusset top, the perimeter of the left gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the left side gusset; and

a bottom gusset attached to the front gusset face, back gusset face, right side gusset and left side gusset, the top gusset, front gusset face, back gusset face, right side gusset, left side gusset and the bottom gusset together forming a skin that envelops the frame, the right gusset top extending onto and overlapping the frame top, the left gusset top extending onto and overlapping the frame top.

2. A bag as described in claim 1 including a top handle attached to the top gusset.

3. A bag as described in claim 2 including a side handle attached to the right gusset side.

4. A bag as described in claim 3 including a right side wheel and a left side wheel attached to the back gusset face.

5. A bag as described in claim 4 including side feet attached to the left side gusset.

6. A bag as described in claim 5 including a moisture barrier attached to the back gusset face.

7. A bag as described in claim 6 including a skid bar attached to the moisture barrier.

8. A method for carrying a bag comprising the steps of:
lifting the bag by a top handle attached to a top gusset of the bag, the top gusset of the bag having a top right side

and a top left side, the bag having a front gusset face attached to the top; a back gusset face attached to the top; a right side gusset having a perimeter with piping, the right side gusset having a right gusset top, the perimeter of the right gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the right side gusset; a left side gusset having a perimeter with piping, the left side gusset having a left gusset top, the perimeter of the left gusset top attached to the top gusset, the front gusset face and the back gusset face so there is not a 90 degree corner formed between the top gusset and the left side gusset; and a bottom gusset attached to the front gusset face, back gusset face, right side gusset and left side gusset, the top gusset, front gusset face, back gusset face, right side gusset, left side gusset and the bottom gusset together forming a skin that envelops the frame, the right gusset top extending onto and overlapping the frame top, the left gusset top extending onto and overlapping the frame top; and

moving the bag.

9. A carrying bag comprising:

a frame having a top; and

a skin for the frame, the skin having a top gusset, and a right side gusset and a left side gusset which extend onto and overlap the frame top so there is not a 90 degree corner formed between the top and the right and left side gussets.

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