Orthopedic Stretcher with Average-Sized Person Can Pass Through 18-inch Opening

The problem:
To design a stretcher for vertical lifting and carrying that will pass through an opening 18 inches in diameter, while containing a person of average height and weight.

The solution:
A modified Robinson stretcher, as shown, for use in vertical lifting and carrying.

How it's done:
The stretcher is constructed of strong but lightweight material and weighs about 20 pounds. The overall dimension of the stretcher permits it to pass through an opening of 18 inches in diameter while containing a person of average height and weight. The design includes a "scissors" effect for easy manipulation of the patient on and off the stretcher, and a variable linear adjustment to accommodate (continued overleaf)
individuals of different heights and to apply traction to the neck, back, and lower extremities.

Notes:
1. The stretcher has been tested. A subject 6 feet tall and weighing 200 pounds was lowered and raised out of an 18-inch diameter opening in a tank.
2. Inquiries concerning this invention may be directed to:
   Technology Utilization Officer
   Marshall Space Flight Center
   Huntsville, Alabama 35812
   Reference: B66-10573

Patent status:
Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: F. X. Lothschuettez of the Mason-Rust Co. under contract to Marshall Space Flight Center (M-FS-811)