

jection but is prevented from passing down the trachea out of reach by the curvature which forces the distal tip to impinge on the anterior tracheal wall.

The use of this cannula has provided a good alternative method to trans-cricothyroid injection and has been consistently more effective than spraying. When used with a thiopental succinylcholine intubation sequence, the return of spontaneous respirations and the induction of the inhalation anesthesia has been

notable for the absence of coughing, straining, and bucking, obviating the need for further thiopental or muscle relaxants and attempts to "smooth out" the course by using injudiciously high and sudden increments of potent inhalation agents. This mode of topical anesthesia has also proven to be a useful adjuvant to general anesthesia for bronchoscopy.

Cutting off the adapter end of a 14 F suction catheter to the required length makes a handy sheath for storing the clean cannula.

The name and address of the manufacturer of this cannula (and other products described in this section) may be obtained from the Journal office: Anesthesiology, J. B. Lippincott Co., East Washington Square, Philadelphia, Pennsylvania 19105.

## A Device for Positioning the Prone Patient

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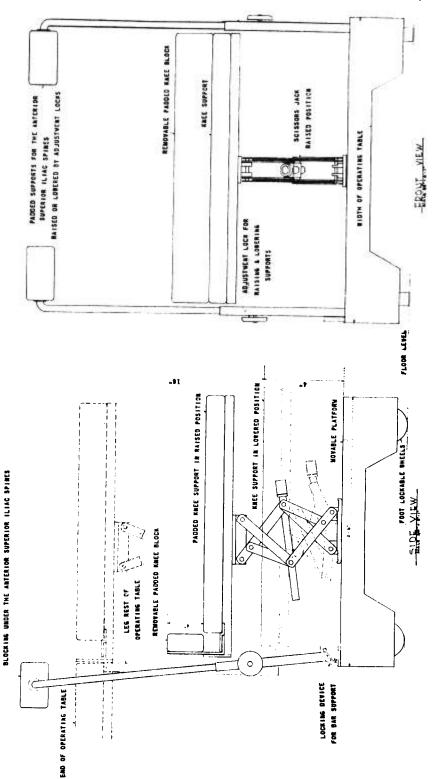
We have devised a mechanical hoist to facilitate placing patients in a satisfactory prone position for surgery on the low back. An earlier publication <sup>1</sup> described the basic principles of safe positioning for patients to be operated on in the prone position and the "Georgia" position: a special adaptation of the prone position.

The hoist is designed to be used with any standard operating table. Its recent develop-

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ment as an inexpensive operating room adjunct is consequent to the availability of satisfactory locking-type casters.

The base of the hoist is heavy ( $\frac{1}{2}$  inch iron plate 20 inches wide by 24 inches long) and is mounted on locking casters. The hoisting mechanism is a scissors-type auto jack which closes to 4" high and opens to 20" high, and is mounted on the  $20'' \times 24''$  base plate. The patient support area is a  $\frac{1}{4}$ " iron plate  $20'' \times 24''$  which is attached to the top of the jack and has a slot in its leading edge for the insertion of a vertical 4" iron plate to act as a knee-guard.



Two adjustable rods are attached by locking universal joints to the forward portion of the base plate, and extended up to terminate in padded iliac bone supports.

The hoist is placed at the foot end of an operating table which has had its foot section dropped to the vertical position. The hoist is raised until its top plate is at table height. The patient is placed in the supine position on the table and hoist, anesthetized, and turned to the prone position with his hips at the The hoist juncture of the hoist and table. is then lowered until the patient's thighs are vertical and his knees are on the hoist. The knee-guard is inserted from one side, and the patient's thighs are strapped to the vertical The hoist is raised until the knee-guard. abdomen clears the operating table. The iliac supports are moved into position and locked there and the hoist is then lowered until the patient's back is as flat as required for surgery. The weight of the thighs rotates the pelvis backward and downward on the fulcrum provided by the iliac supports, flattening the lordotic curve. Part of the patient's weight is supported by his knees and part by the iliac support. The abdomen then is entirely free from pressure, the back is flat, and there is no interference with venous return from the thighs. One nurse can do the work since the hoist jack is a screw adaptation with a great mechanical advantage. This method of achieving the "Georgia Prone" position eliminates all lifting and straining on the part of the personnel involved.

## REFERENCES

1. Smith, R. H., Gramling, Z. W., and Volpitto, P. P.: Problems related to the prone position for surgical operations, ANESTHESIOLOGY 22: 189, 1961.

## General Principles of Blood Transfusion

Among his many other duties, the anesthesiologist is frequently a dispenser and administrator of blood to patients before, during, and after operation. This commonplace usage of blood may convey the concept to the anesthesiologist that transfusion is a "routine therapeutic procedure." He may lose sight of some of the important factors in the indications for transfusion as well as its dangers.

To aid as a guide in the entire problem of improving transfusion service and safety to patients, the Subcommittee on Transfusion Problems of the National Academy of Sciences, National Research Council, has made available to physicians a concise and clearly written compendium by 15 leading authorities in the field of transfusion—"General Principles of Blood Transfusion," Edited by Max M. Strumia and others: *Transfusion 3: 303, 1963.* (Bound copies of the compendium are also available, see Book Reviews.)

The compendium describes the practices of blood banking, the safeguards which are necessary in maintaining a modern, effective blood bank, and presents a critical comprehensive analysis of the indications for transfusion in the light of those disturbances in a patient which require the use of blood. The compendium defines the important basic and clinical considerations concerned with the use of blood and provides guidelines for improvement in its use. It is obvious that in such a field ignorance and controversy exist. These are dealt with and acknowledged by the experts.