Correspondence

External Vigilance

To the Editor:—This letter is written to support the concept put forth by John Ditzler (ANESTHESIOLOGY 32: 87, 1970) concerning the need for eternal vigilance in checking anesthesia machines before use.

Until recently in the operating rooms at this hospital the Ohio anesthesia machines had two G size cylinders mounted on the rear of the machine as the major sources of oxygen and nitrous oxide. The following is an account of an accident involving the oxygen supply that could have resulted in serious injury to either the patient or anesthesiologist.

FIG. 1.

The cylinders were connected to the machine by a set of flexible metal lines, bolted to the cylinder proximally and attached by a yoke block to the machine. The lines were routinely disconnected from both the cylinder and the yoke in order to change empty containers. In the process of changing them one day, a fresh oxygen cylinder was mounted on the machine but the connecting line was bolted only to the cylinder end, leaving the end with the yoke block unattached. When the machine was being readied for anesthesia, the oxygen tank was turned on, resulting in a sudden escape of oxygen through the line. The resulting pressure caused the yoke block to act as an air hammer, swinging from behind around to the front of the machine. In the process its path carried it up under the anesthesiologist's outstretched arms, as he stood in front of the machine, and across the front of the machine, where it hit the protective cover over the flowmeters. This resulted in destruction of the protective cover and all of the flowmeters (fig. 1). The impact was of tremendous force, producing a sound like an explosion, and sent glass and plastic spraying about the machine and the head of the operating table.

If a patient had been on the operating table, there could have been injury owing to the flying glass and plastic, and if the anesthesiologist had been closer to the machine, he easily could have sustained serious thoracic or abdominal injury.

Prevention of recurrence of this accident lies entirely within the realm of being careful and thorough in the inspection and testing of anesthesia equipment prior to use.

RICHARD J. JONES, M.D.
Mount Carmel Mercy Hospital
Detroit, Michigan 48235