## ORDNANCE AND GUNNERY

## A TEXT-BOOK

PREPARED FOR THE CADETS OF THE

UNITED STATES MILITARY ACADEMY, WEST POINT

## BY

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mortar is brought into this plane or into any determined position with respect to the plane, and the first round is fired. Correction for error in direction is afterwards made by means of marks on the platform.

The Gunner's Quadrant.—Elevation is given to mortars by means of the gunner's quadrant shown in Fig. 241. The movable

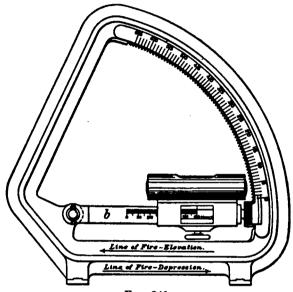


Fig. 241.

arm b carries a spirit level and may be set at any desired angle with the base of the instrument up to 65 degrees. The notched

scale fixes positions for the arm b at whole degrees. Minutes are obtained by sliding the level along the scale on the curved arm b. The principle of the sliding level on the curved arm will be readily understood by reference to Fig. 242.

The quadrant may be used to measure angles of elevation or of depression from 0 to 65 degrees.



The quadrant, set to any desired angle of elevation, is placed on the gun on a seat prepared for it parallel to the axis of the piece. The instrument is so placed that the proper arrow on its