

THE ADAMS CEPHALOSTAT*

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THIS cephalostat has been designed with special regard to strength and rigidity combined with precision and ease of operation.

GENERAL FEATURES

Attention has been given in designing the unit to ensure long life and freedom from troubles arising during use. For instance it is impossible to force the earpost against the cassette holder accidentally or to raise the cassette holder against the rotary part of the cephalostat and so damage the moving parts.

The construction throughout is to high engineering standards and the finish is in stove enamel and satin chromium plating (*Fig. 1*).

ADJUSTMENT OF THE ROTARY MOVEMENT

A large open scale facilitates precise setting of this adjustment. The rotation is locked by a crown which requires only a quarter-turn to fix or release the movement. The special design of this lock ensures ease and simplicity of adjustment of the rotatory movement.

ADJUSTMENT OF THE EARPOSTS

The earposts are of perspex and while they show on the X-ray film, do not obscure detail in the region of the basisphenoid bone. Adjustment is carried out by a coarse-pitch screw. By this means the earposts may, if necessary, be moved quickly, that is to say, two turns of the adjustment separates the earplugs by $\frac{1}{2}$ in., but at the same time the adjustment is very fine and sensitive, because a quarter-turn will separate or approximate the earposts by $\frac{1}{16}$ in., or one-eighth turn makes an adjustment of $\frac{1}{32}$ in.

THE WEDGE FILTER

A duralumin wedge filter is provided to bring out detail in the region of the nasal bones and the soft-tissue outlines of the profile. These struc-

tures are usually too heavily exposed to be visible in the X-ray film if some of the X-radiation is not held back by such means as a graduated metal filter.

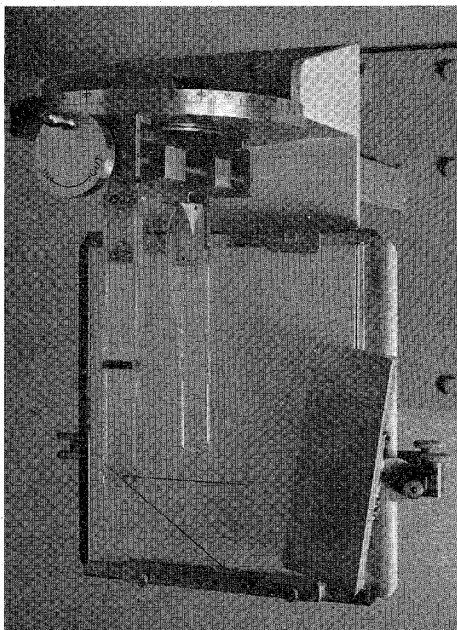


Fig. 1.—The Adams cephalostat with wedge filter, protractor, and X-ray cassette in position. A rigid wall-mounting bracket can be provided.

THE PROTRACTOR

The protractor is used to align the Frankfurt plane horizontally or to any desired angulation to the horizontal (Adams, 1963). A small spot of

* Obtainable from N. Taylor (Engineering) Ltd., Broom Road, Parkstone, Dorset.

A Demonstration presented at the Country Meeting of the B.S.S.O. held in Eastbourne on 20 May, 1966.

lead foil or black paper is placed over the orbital point with a light smear of petroleum jelly. The patient is then asked to raise or lower the head until the spot is aligned with the horizontal or at any other required alignment. A lead-foil spot will show on the X-ray film and may be used as a check in the assessment of the position of the orbital point.

GRIDS, CASSETTES, AND INTENSIFYING SCREENS

These are standard X-ray equipment and the specification of these items will depend on the X-ray technique employed.

The cephalostat is designed to use 10 in. × 12 in. films, and the cassette holder will accept standard cassettes of this size.

The modern all-metal type of grid, which is so fine that the grid lines are hardly visible in the film, is recommended. Such grids do not require to be moved during the exposure and may simply be fixed in front of the film cassette and left in position. Personal preference will dictate which type of grid will be required, but an all-metal type with 100 lines per inch, ratio 12 : 1 focused at 140 cm. is strongly recommended.

REFERENCE

ADAMS, C. P. (1963), *Dent. Practit.*, **14**, 58.