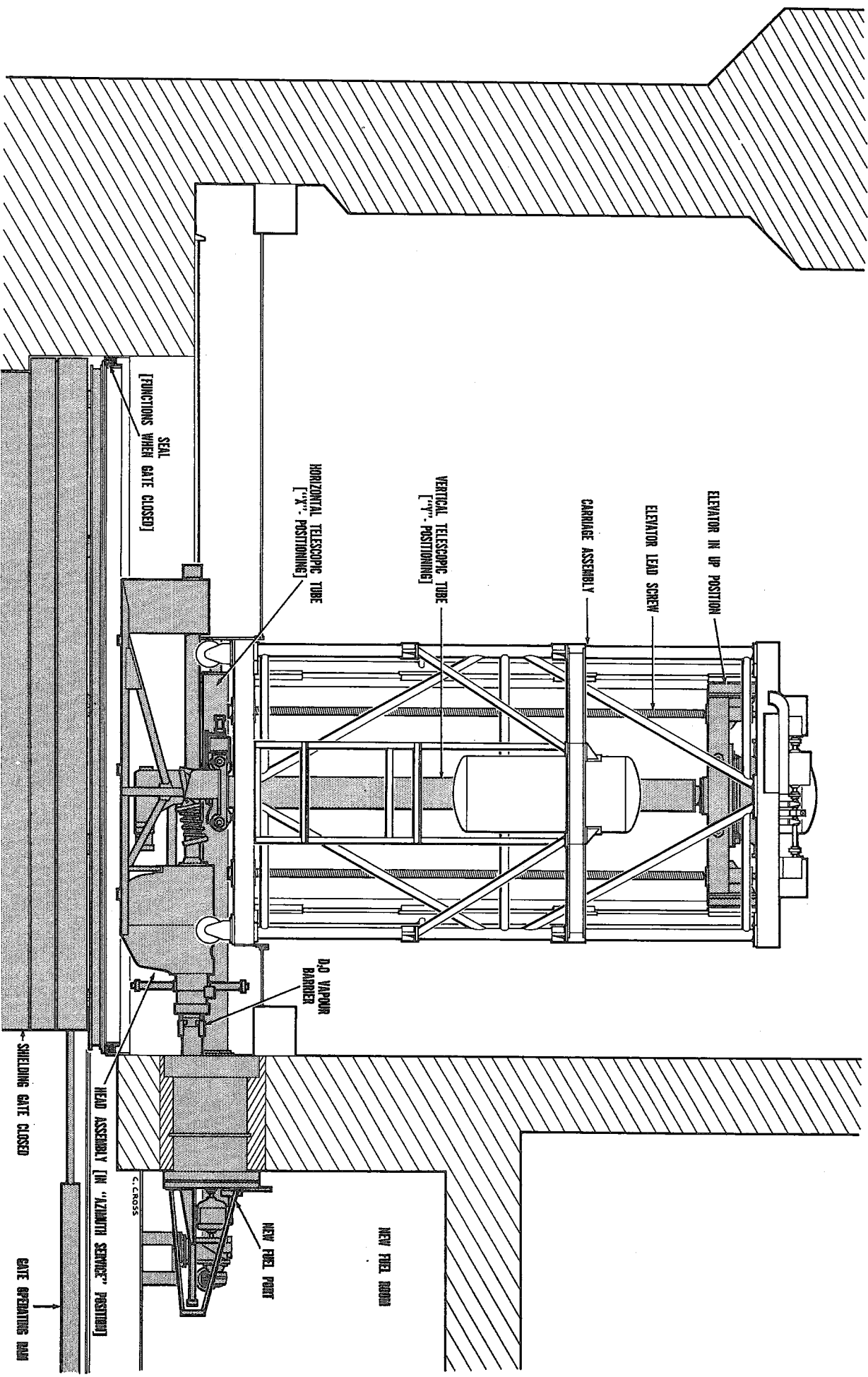
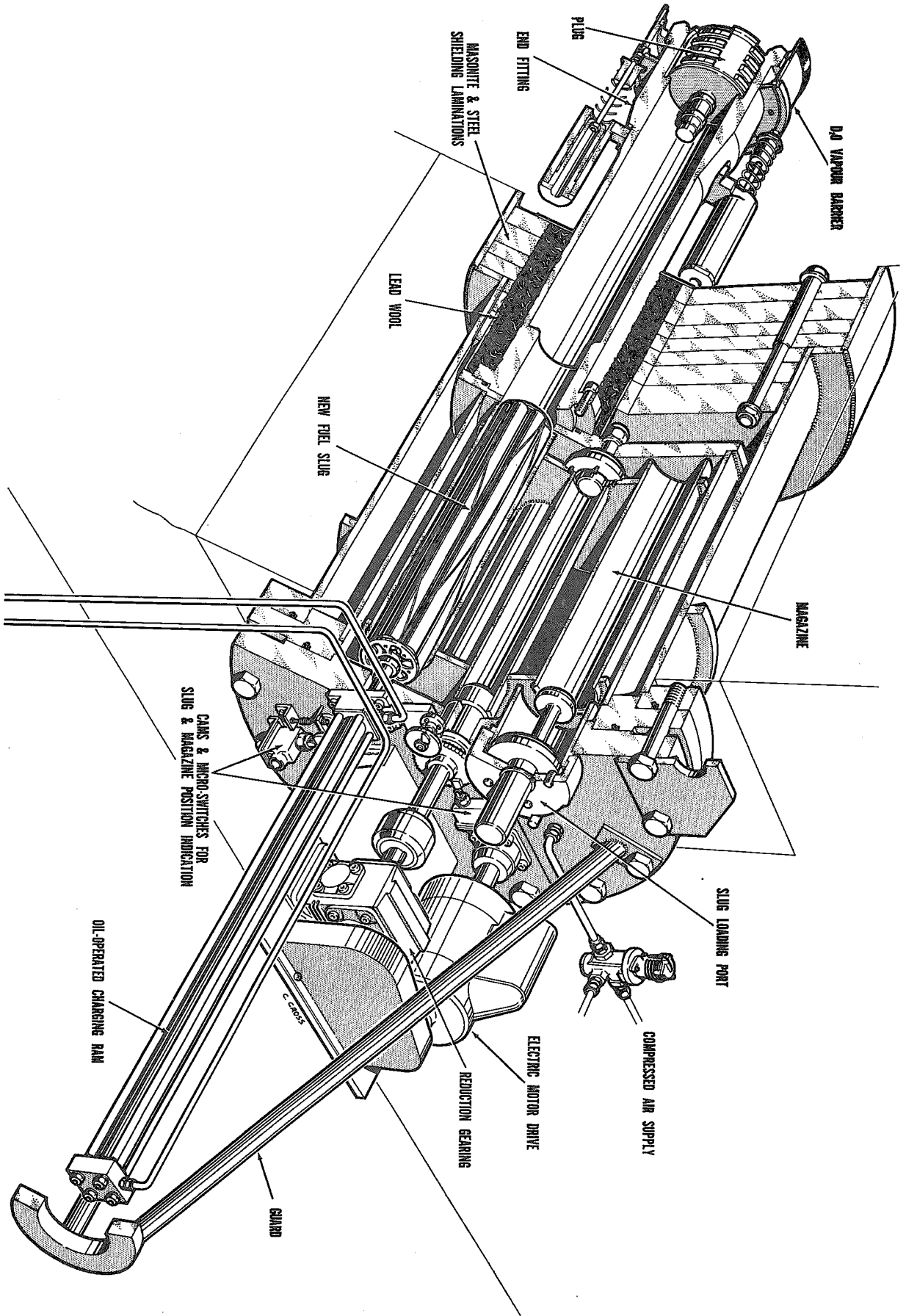


GENERAL VIEW OF FUELING MACHINE ROOM SHOWING EAST AND WEST MACHINES AND ASSOCIATED EQUIPMENT

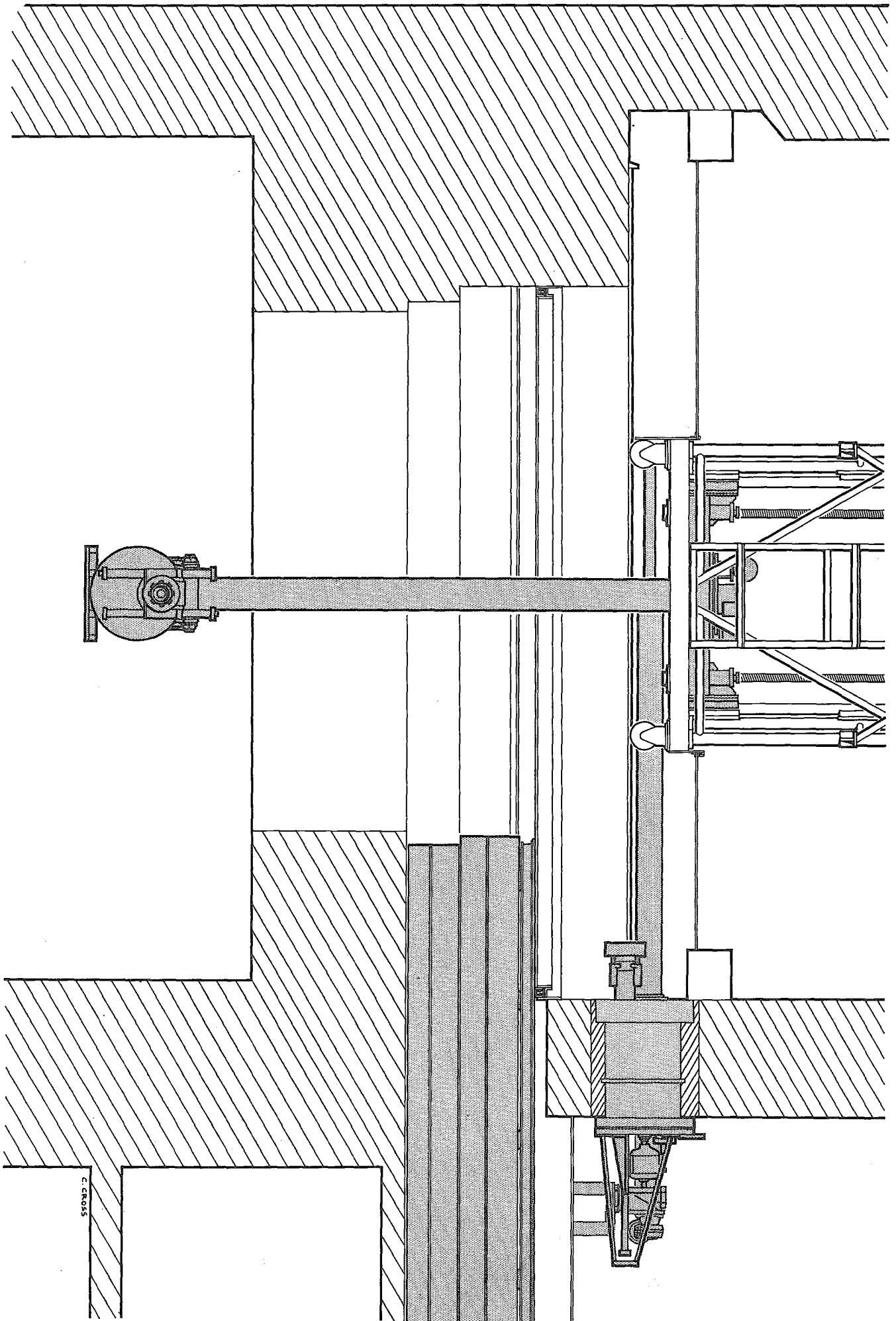




FUELING MACHINE AT THE "HOME" POSITION

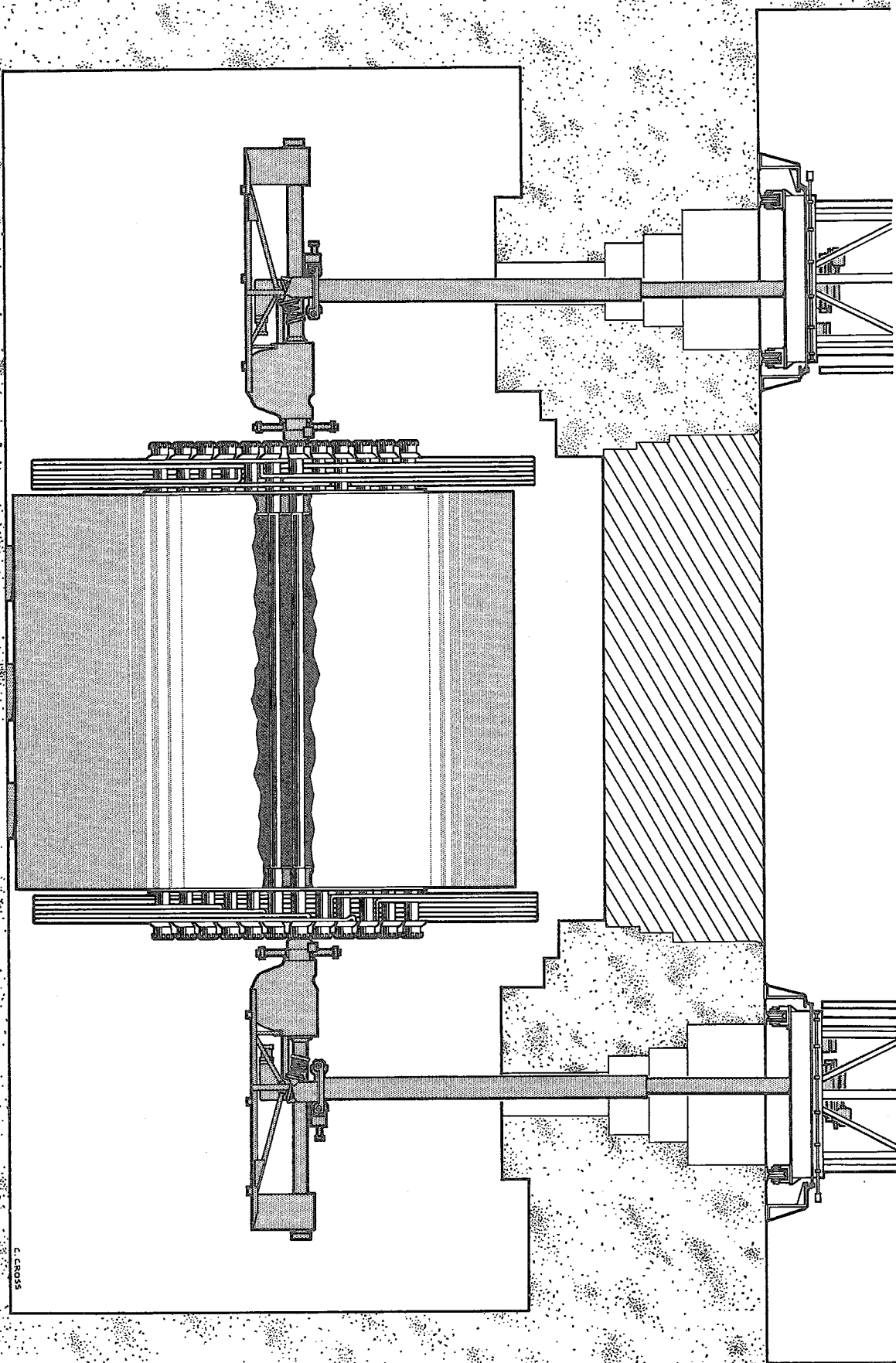


CUT-AWAY OF NEW FUEL PORT

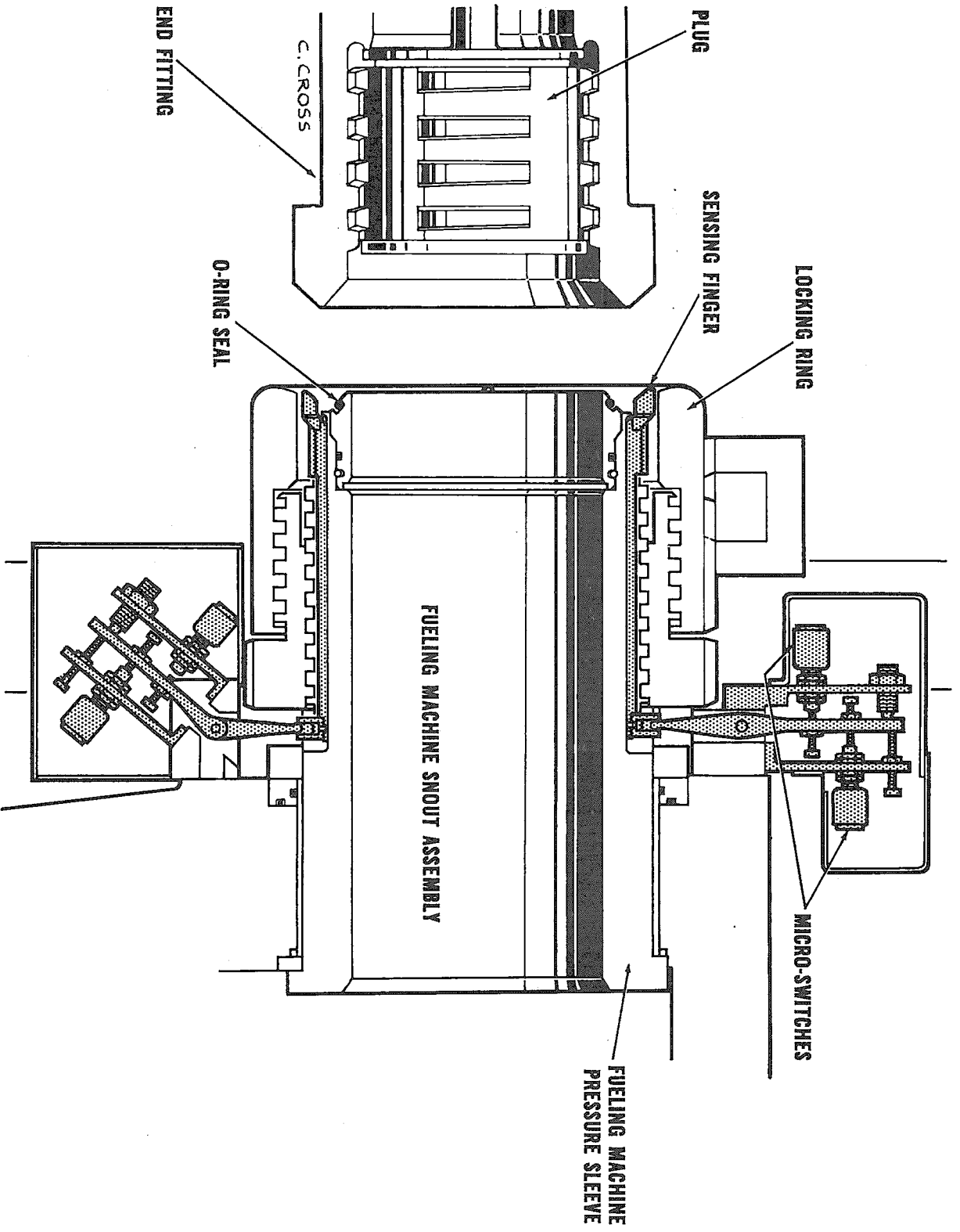


C. CROSS

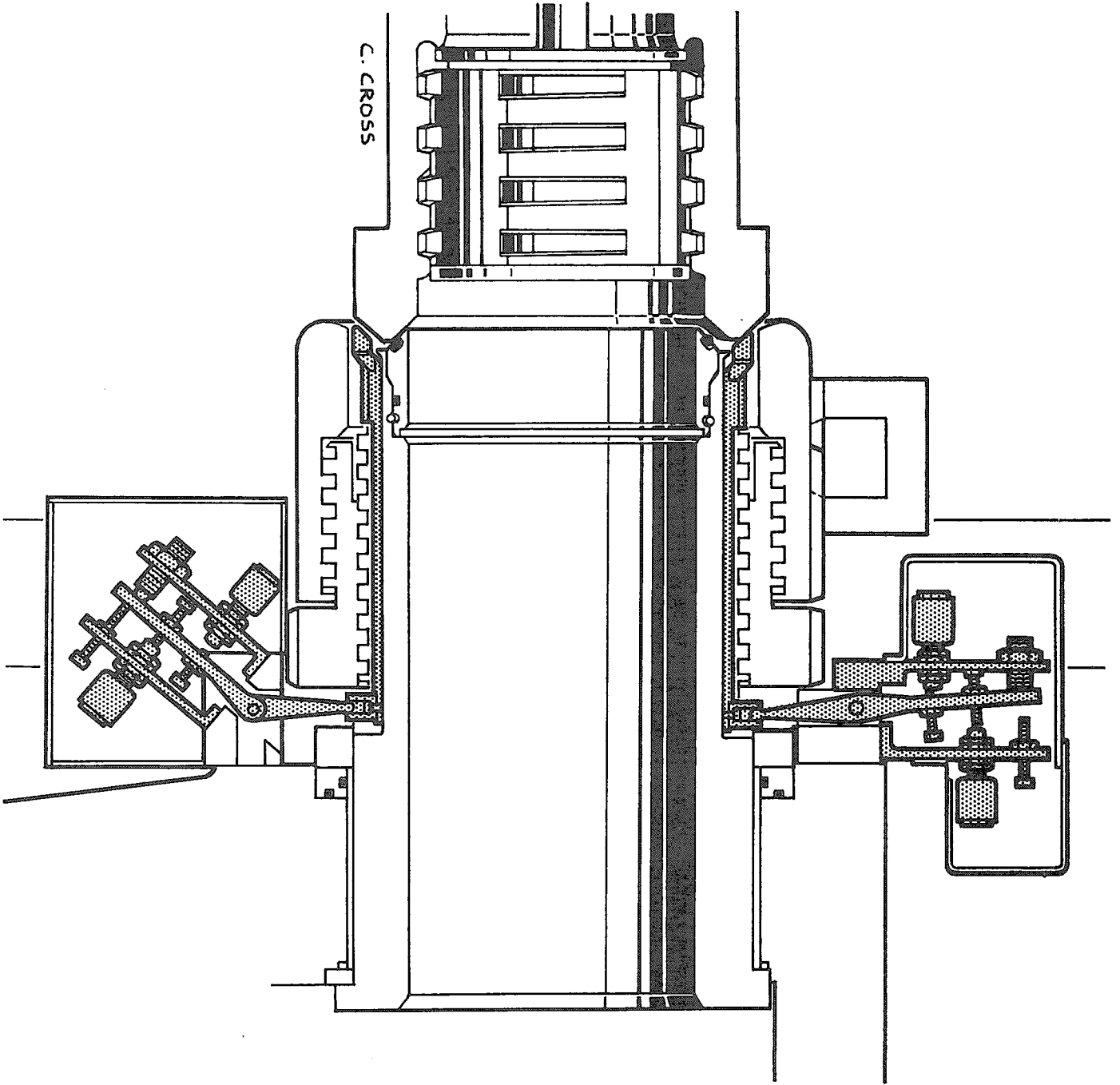
F/M. 5



C CROSS

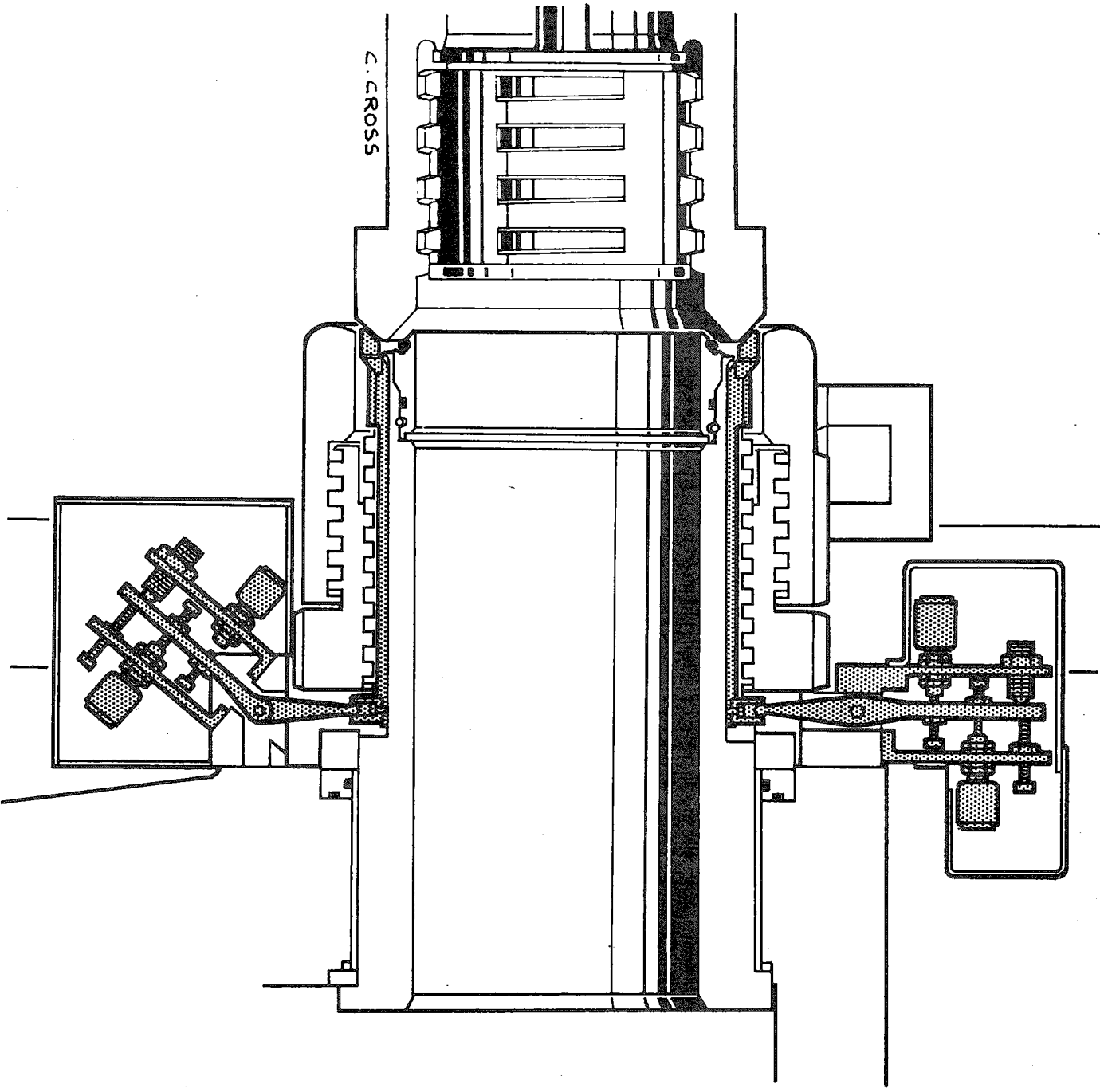


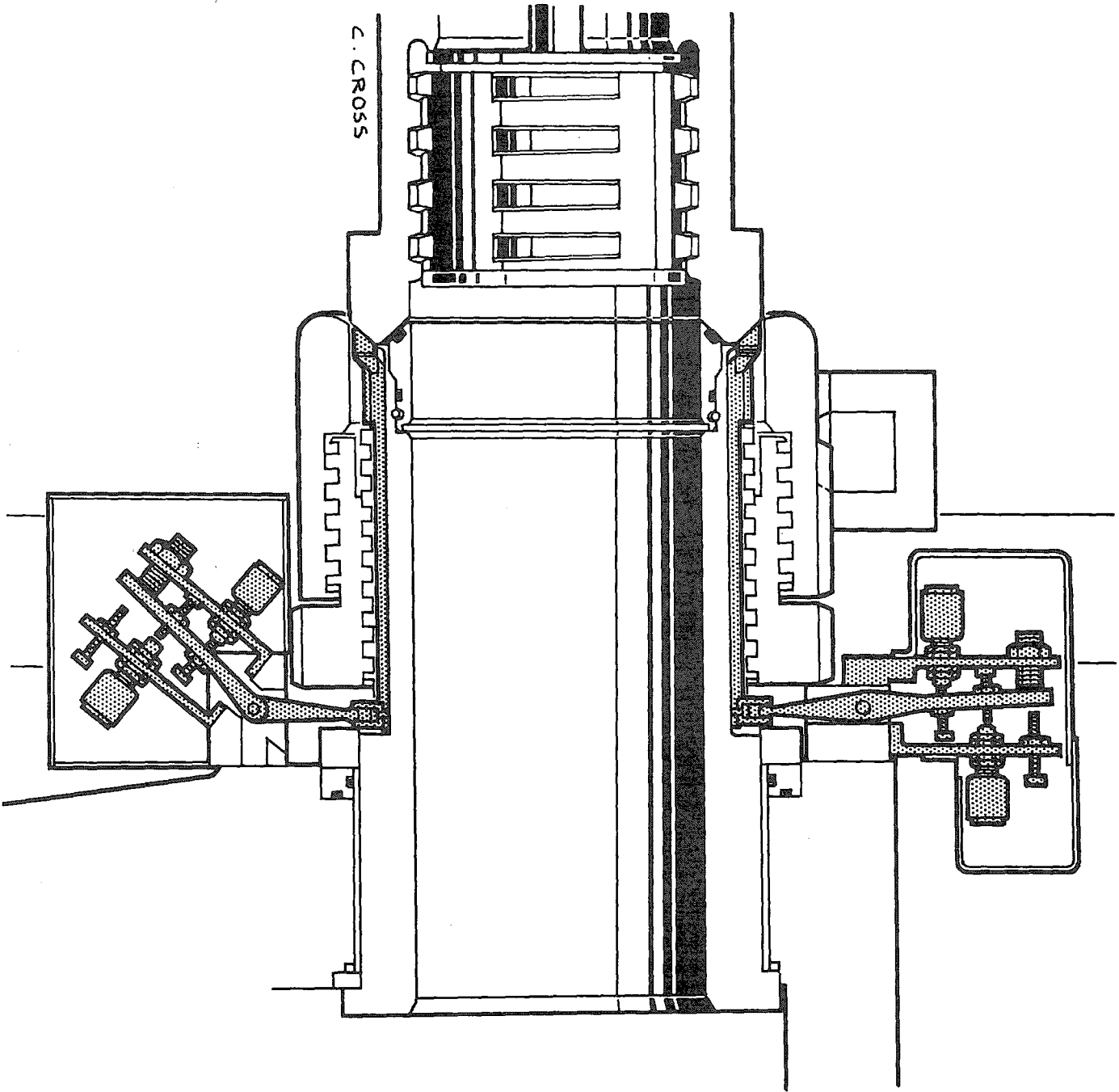
DETAILS OF FUELING MACHINE SNOUT AND REACTOR END FITTING SHOWN AT START OF FINE HOMING OPERATION



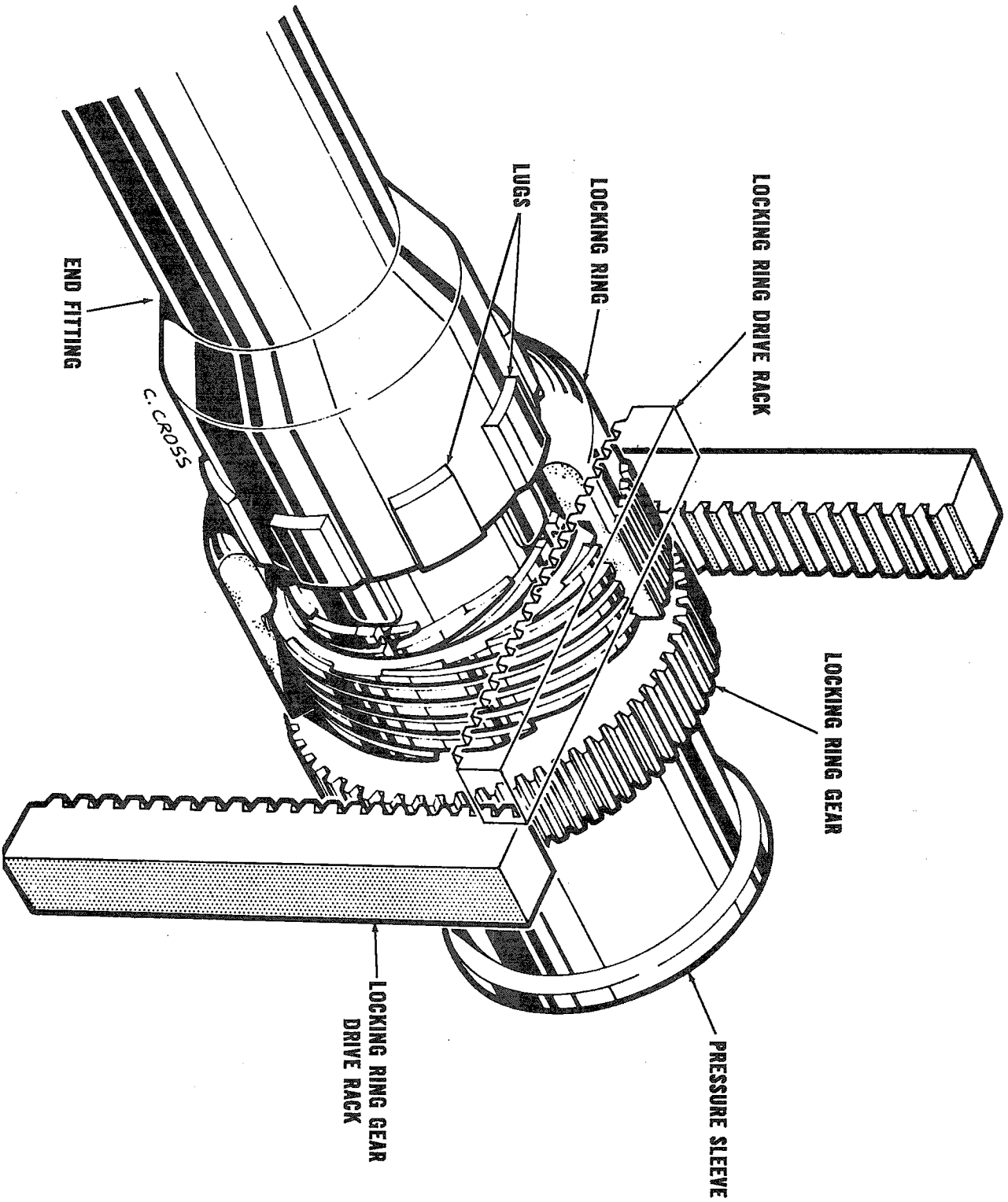
FM 9

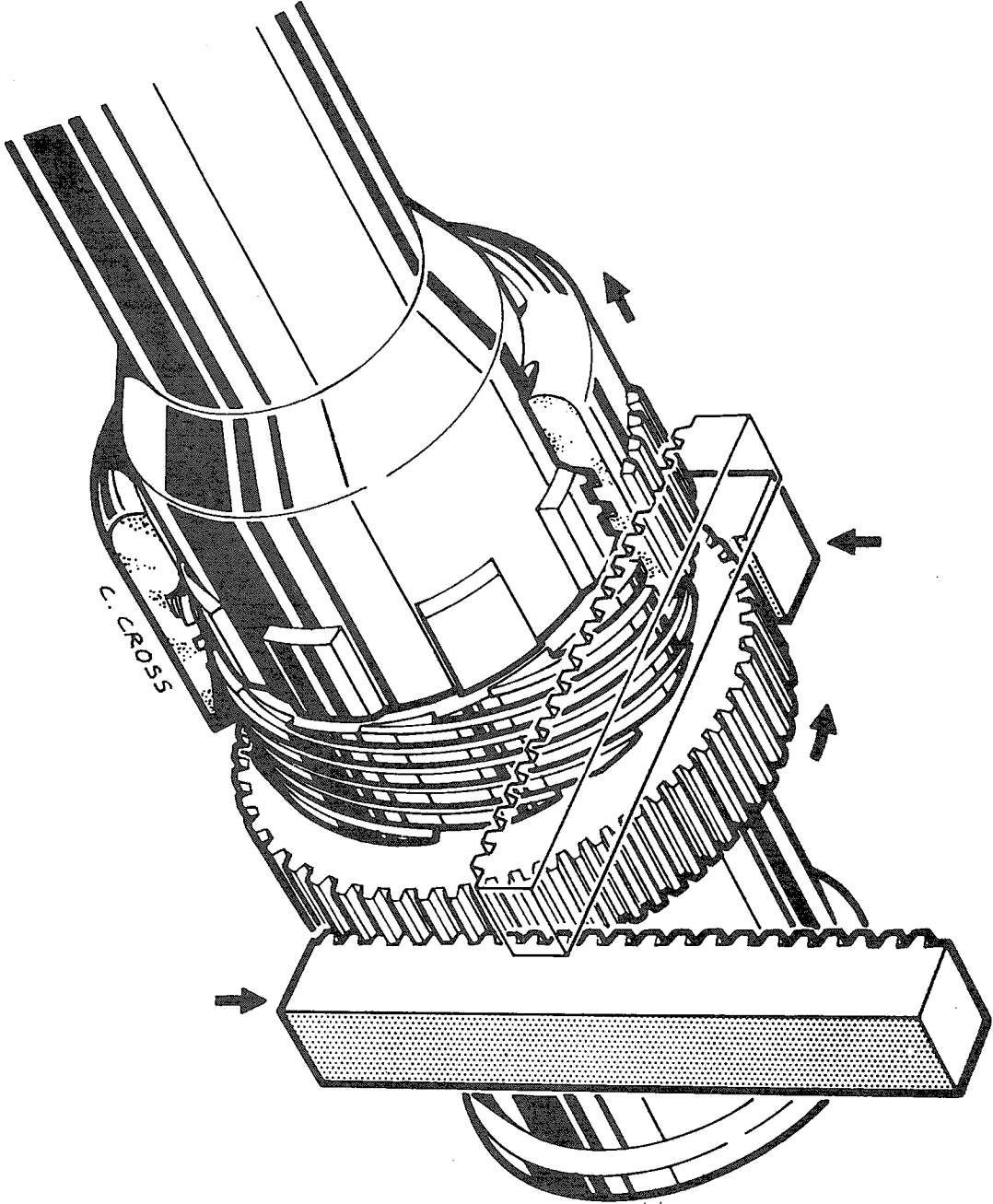
C. CROSS

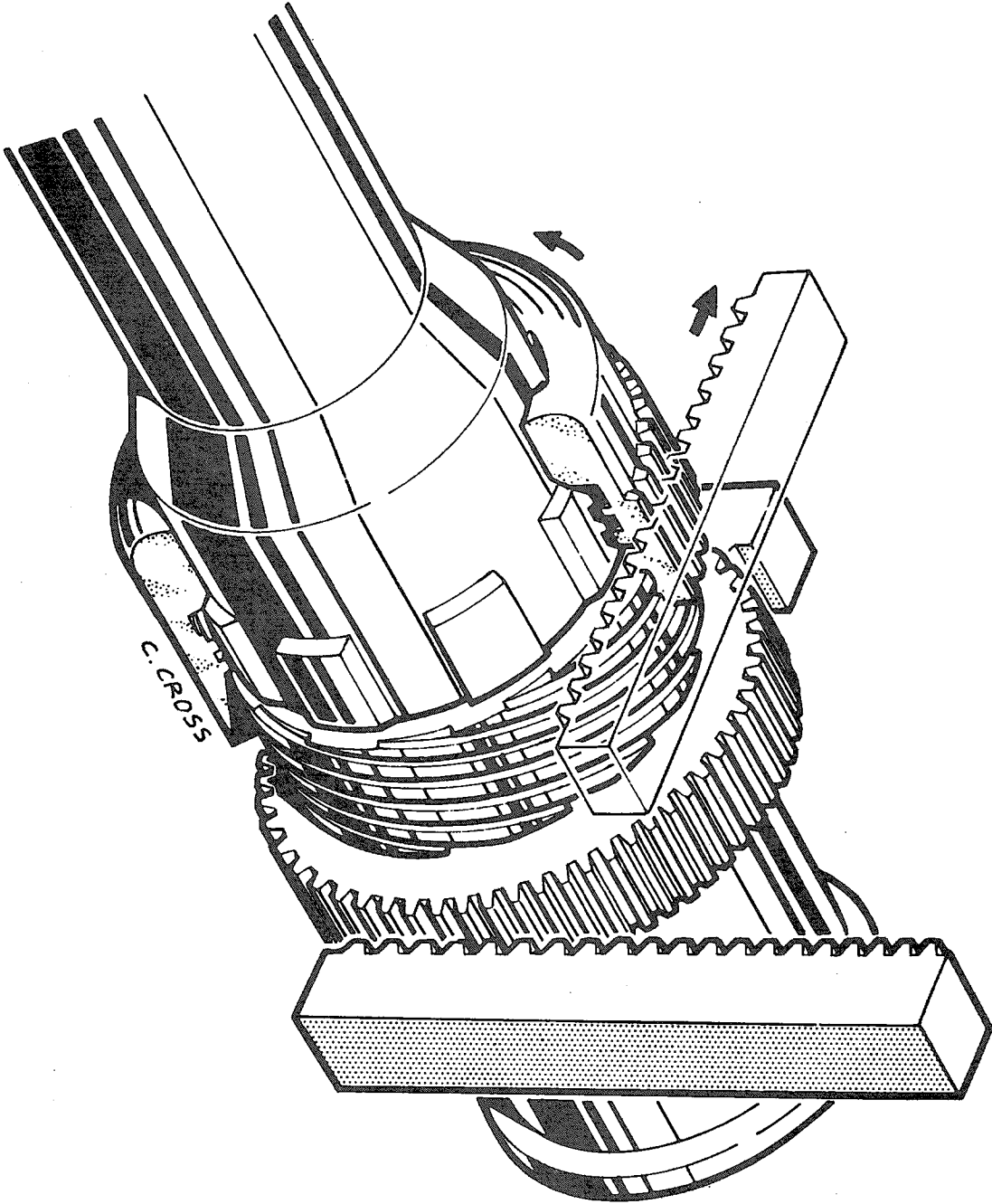


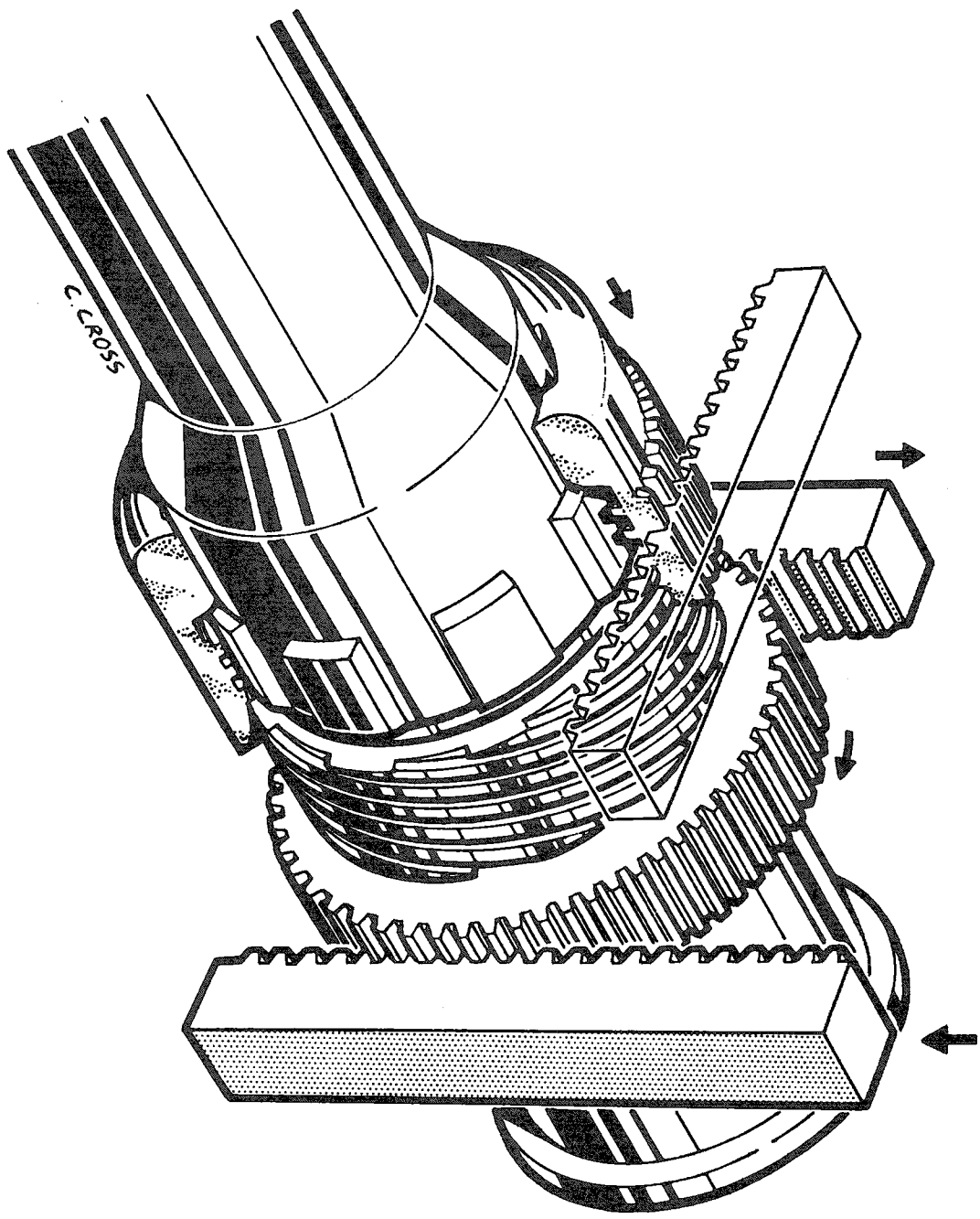


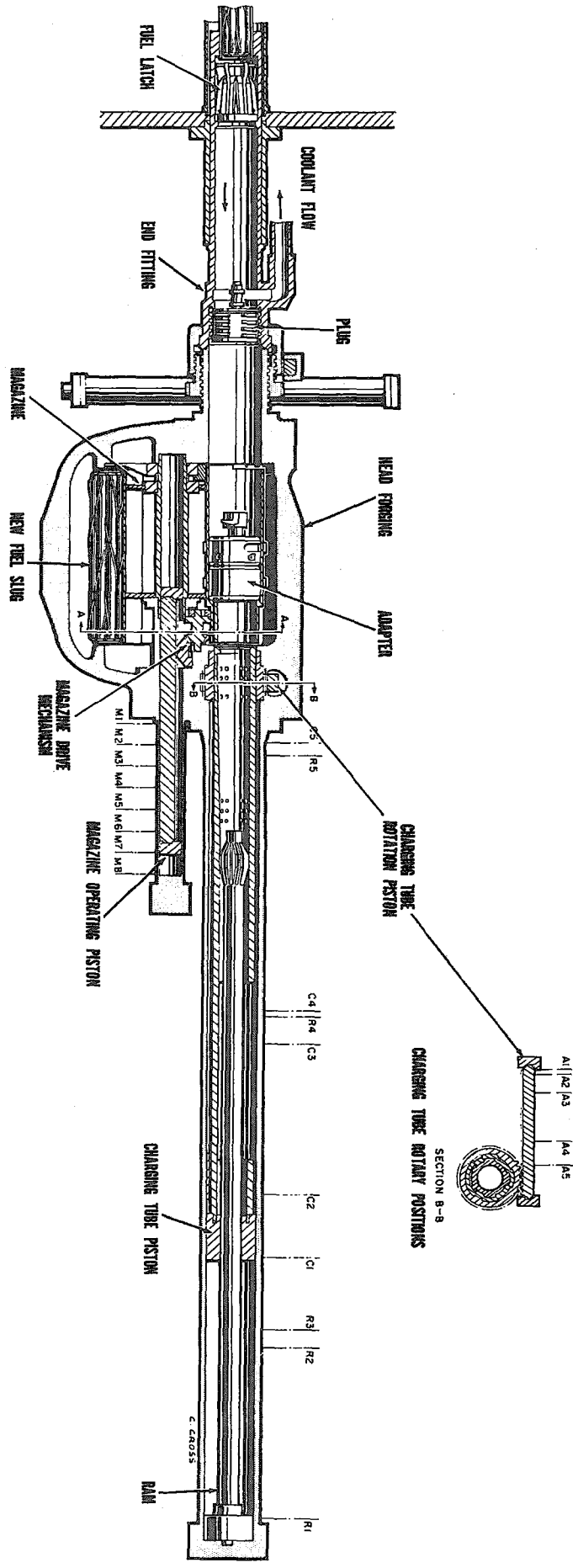
DETAILS OF FUELING LINE SNUOT AT COMPLETION OF FINE HOMING OPERATION
READY TO LOCK ONTO REACTOR END FITTING.



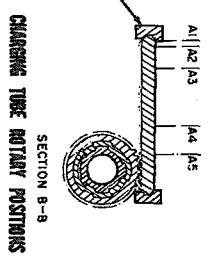
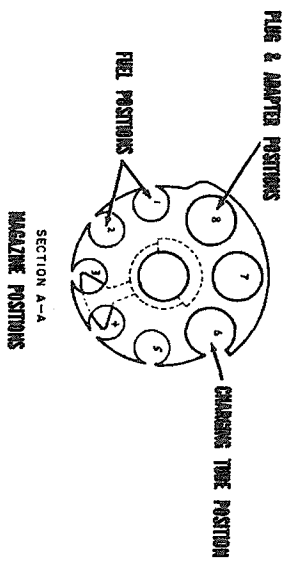


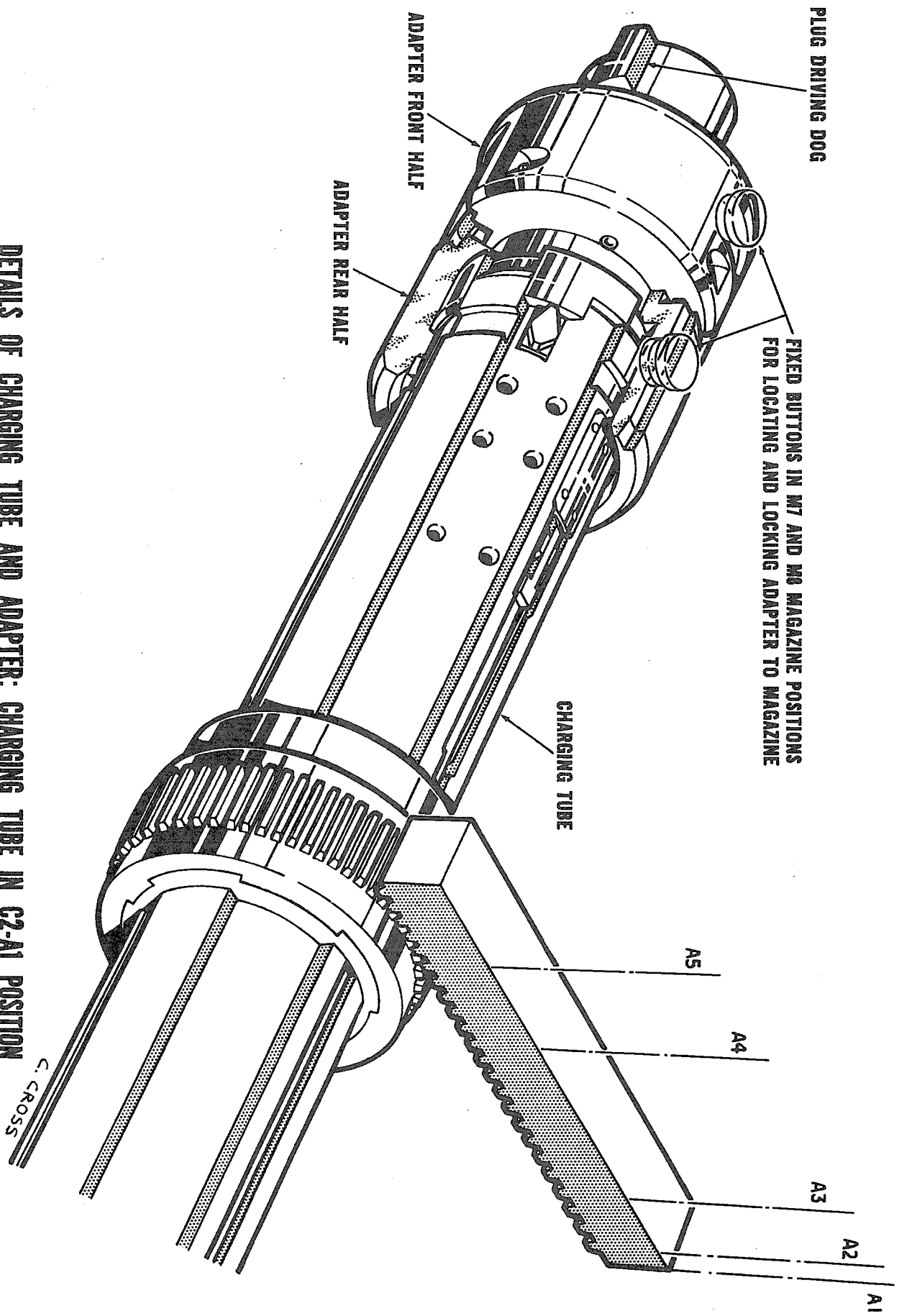






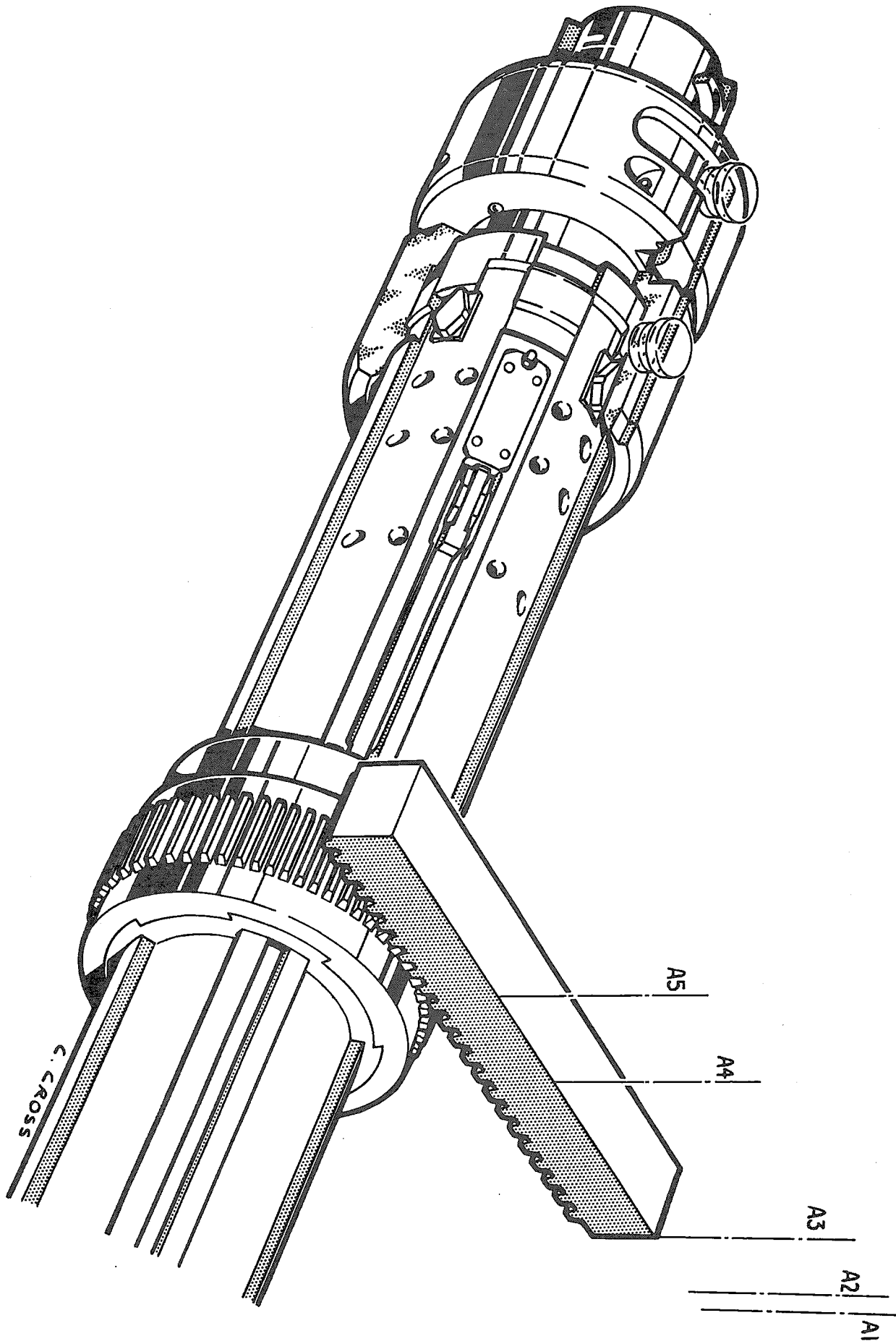
SIMPLIFIED CUT-AWAY OF HEAD SHOWING THE MAIN INTERNAL COMPONENTS.
 (MACHINE SHOWN LOCKED TO OUTLET END FITTING PREPARATORY TO LOADING NEW FUEL.)



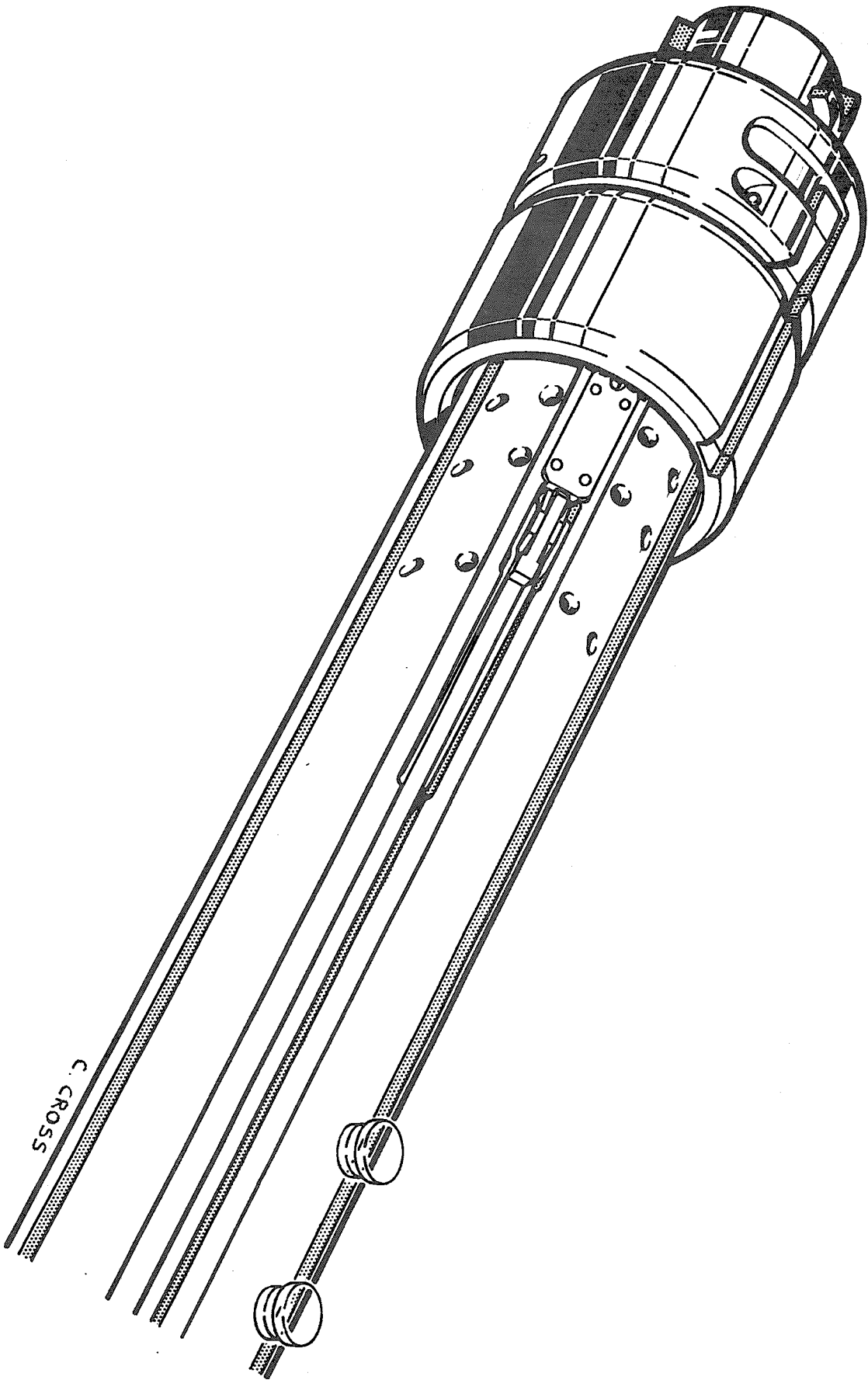


DETAILS OF CHARGING TUBE AND ADAPTER, CHARGING TUBE IN C2-A1 POSITION
 PRIOR TO UNLOCKING ADAPTER FROM MAGAZINE

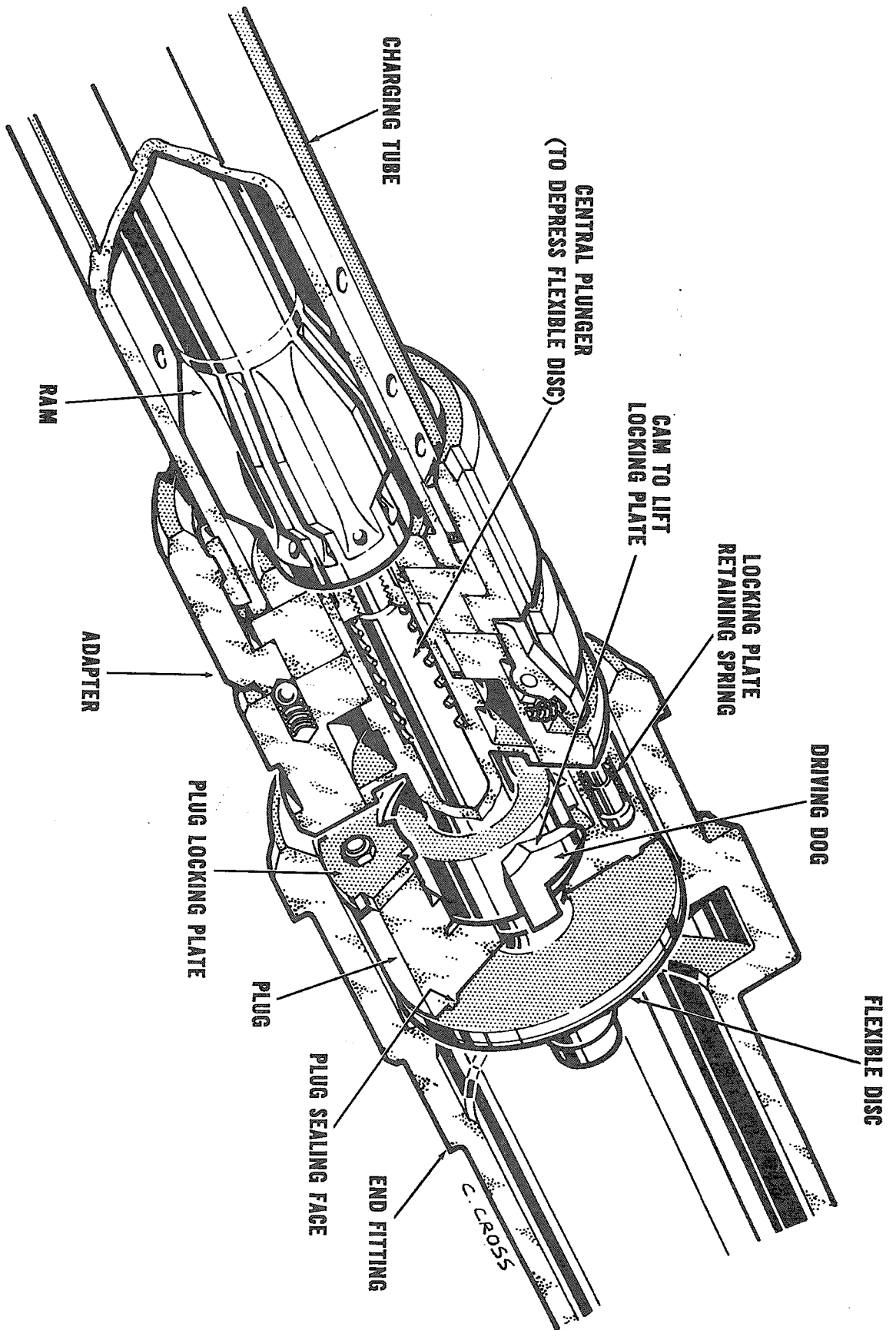
F418



F/M 19

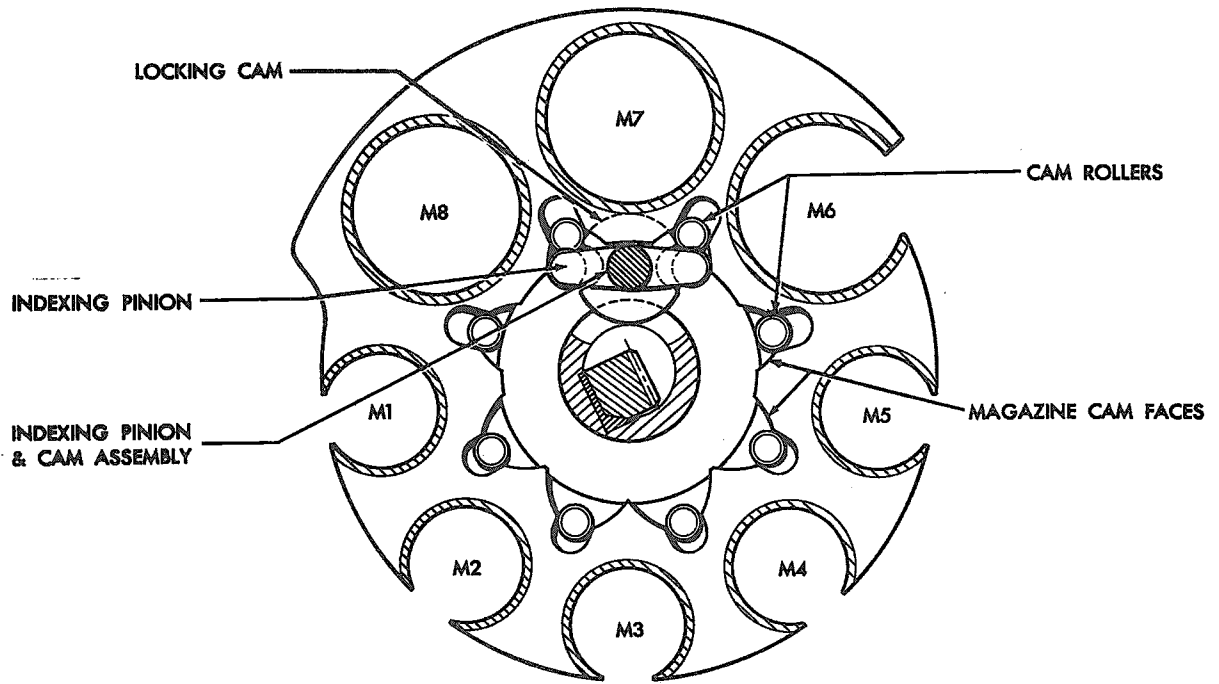


F/M 20

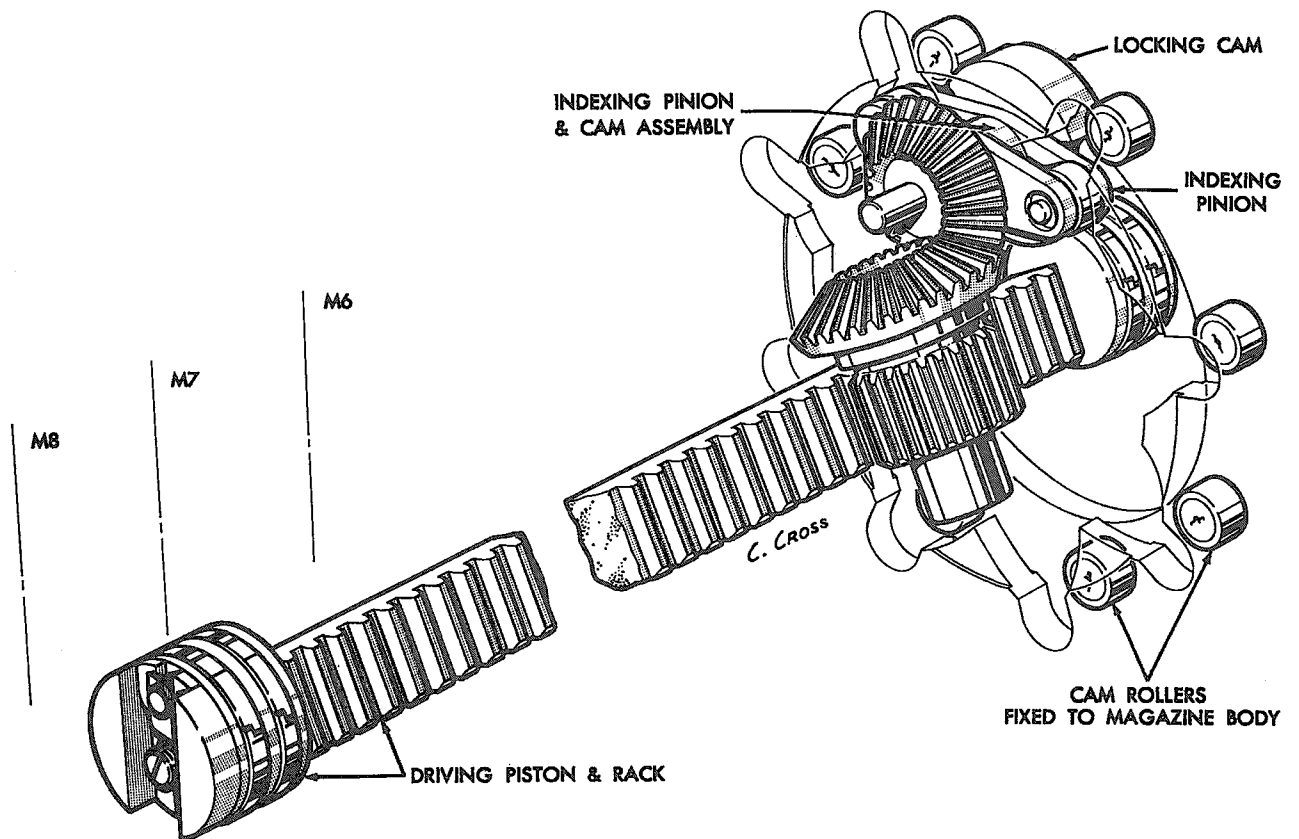


CHARGING TUBE AND ADAPTER IN C4, A3, POSITION READY TO UNLOCK PLUG;
 RAM SHOWN IN R4 POSITION DEPRESSING FLEXIBLE DISC TO UNLOAD PLUG.

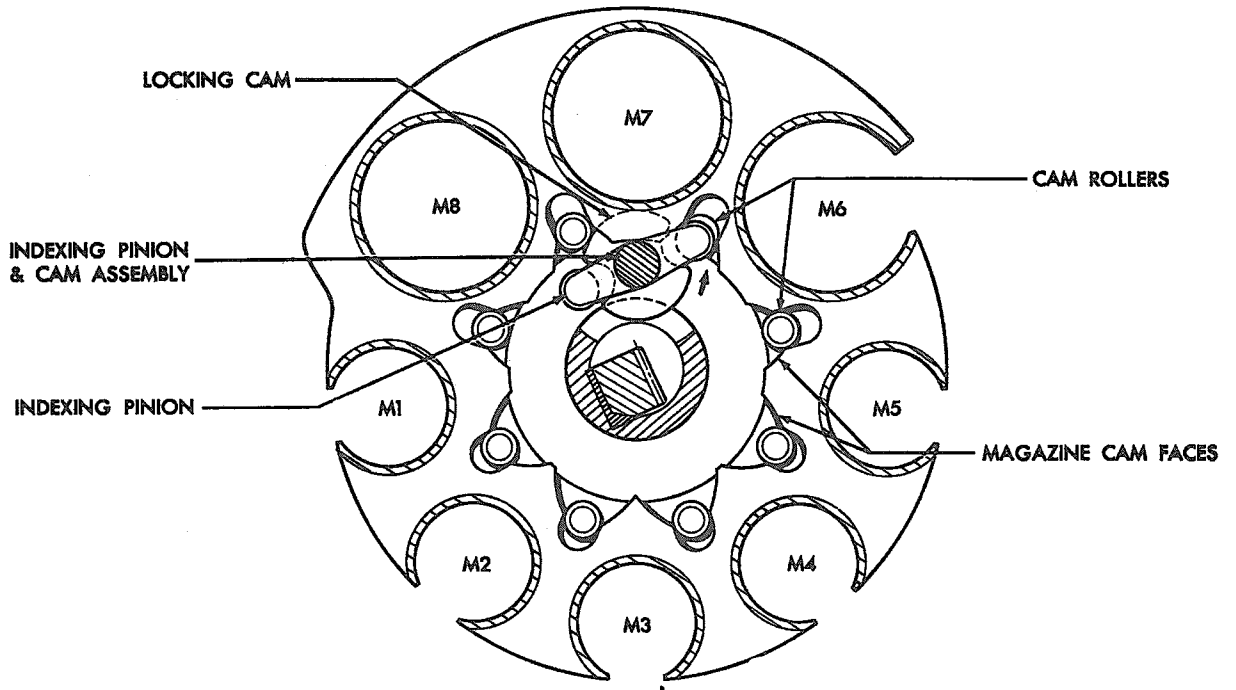
FM 22



Magazine geometrically locked by the position of the Indexing Pinion relative to the Magazine Cam Faces.

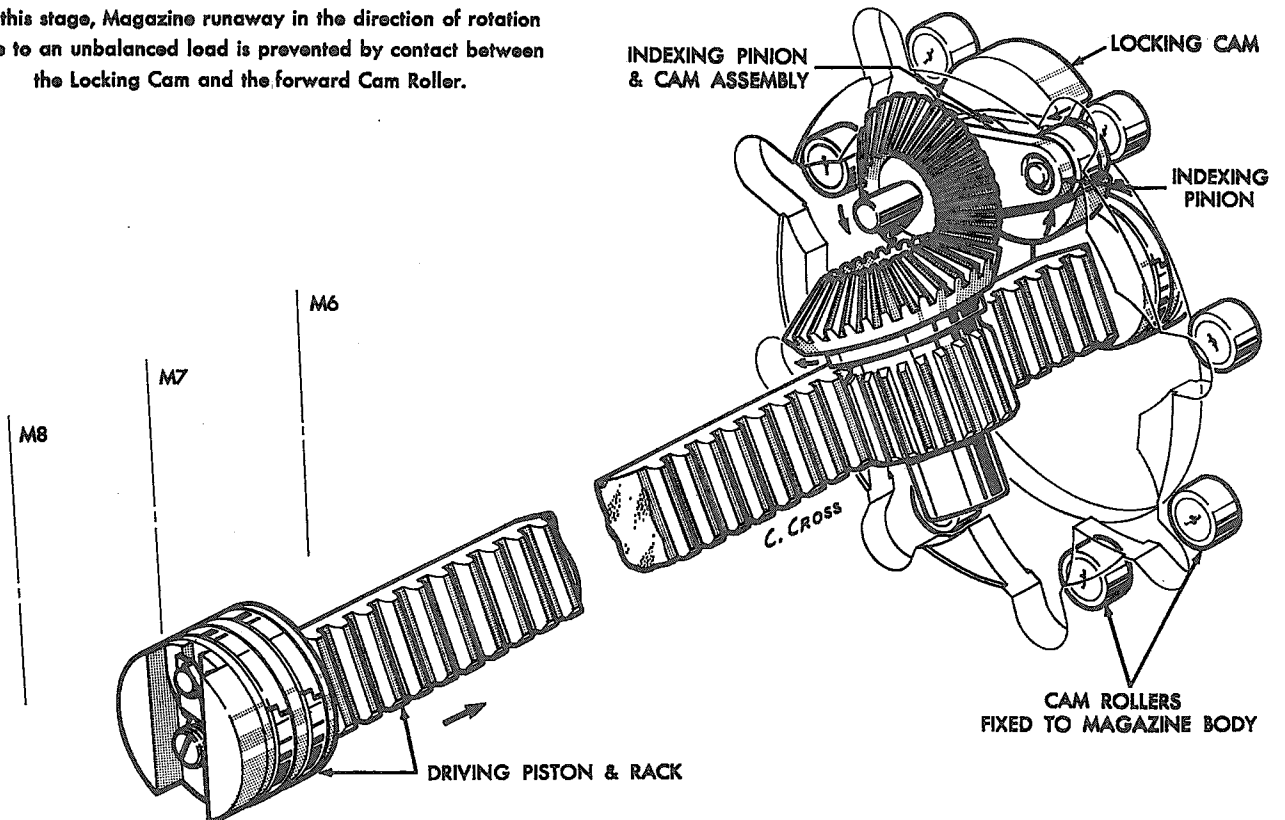


MAGAZINE INDEXING, START (Locked) POSITION

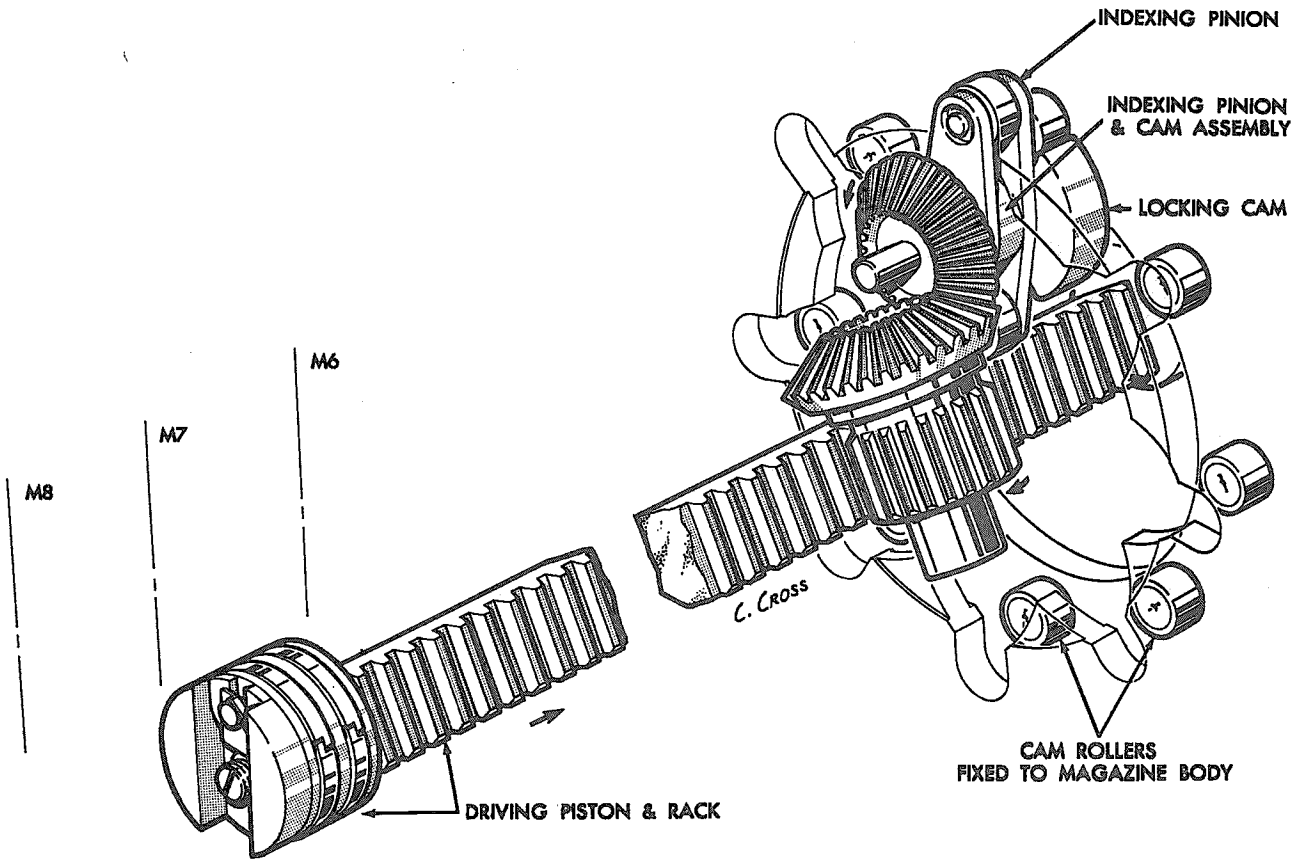
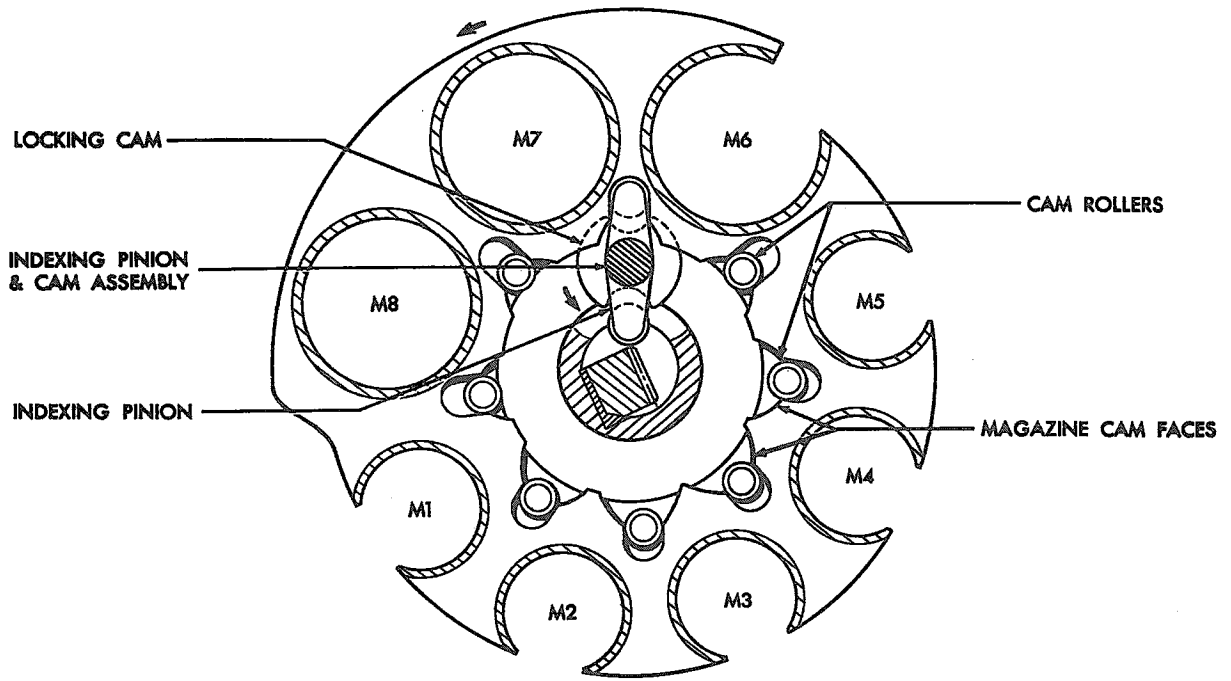


Indexing Pinion has rotated out of engagement with the Magazine Locking Faces and is on the point of driving the Magazine.

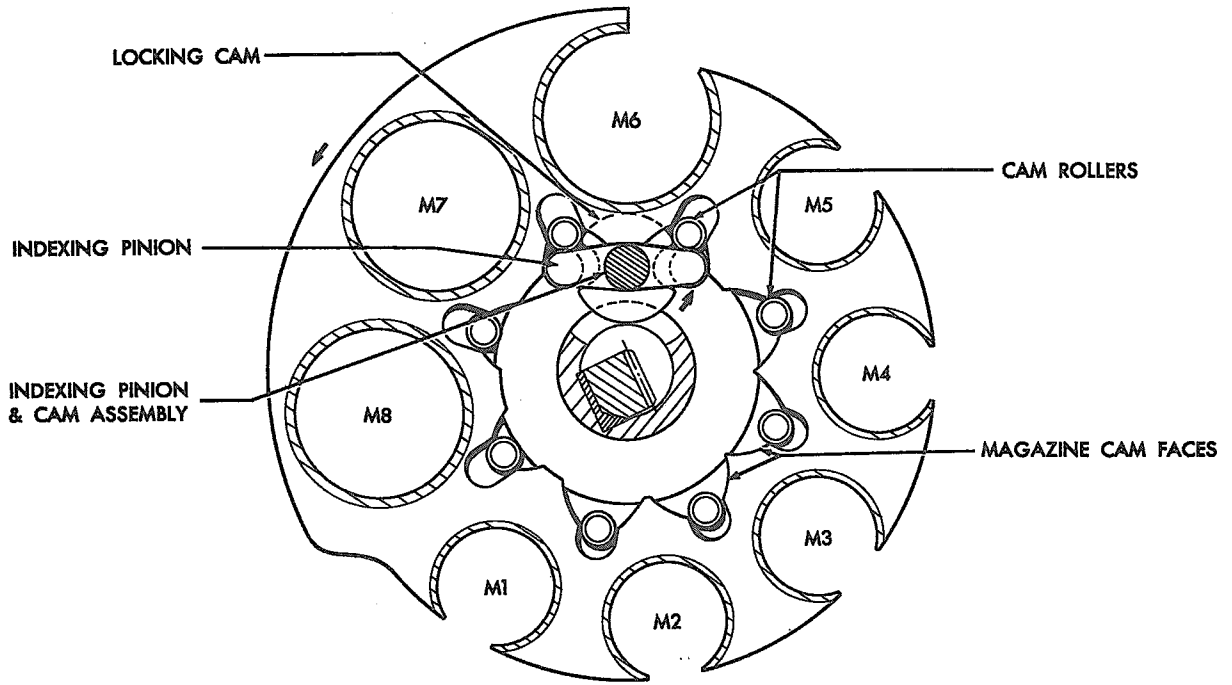
At this stage, Magazine runaway in the direction of rotation due to an unbalanced load is prevented by contact between the Locking Cam and the forward Cam Roller.



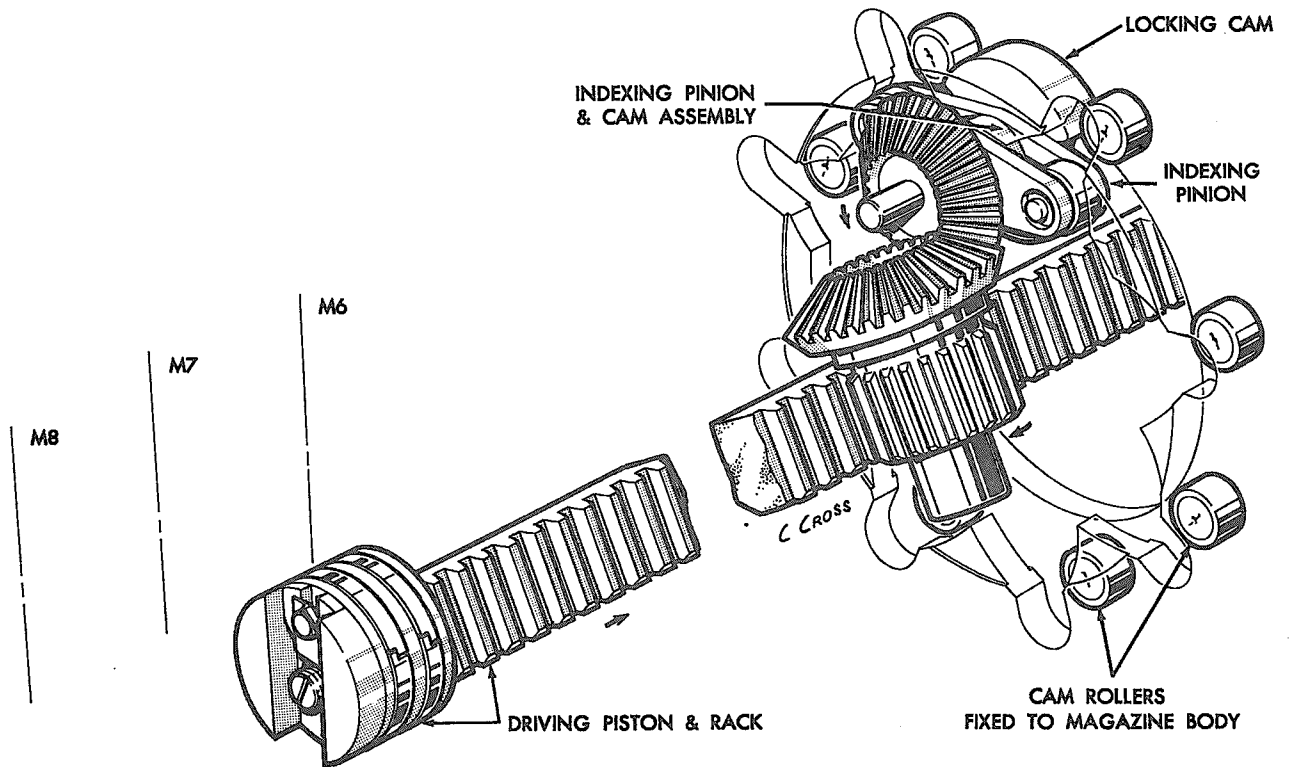
MAGAZINE INDEXING, ROTATION OF MAGAZINE JUST COMMENCING



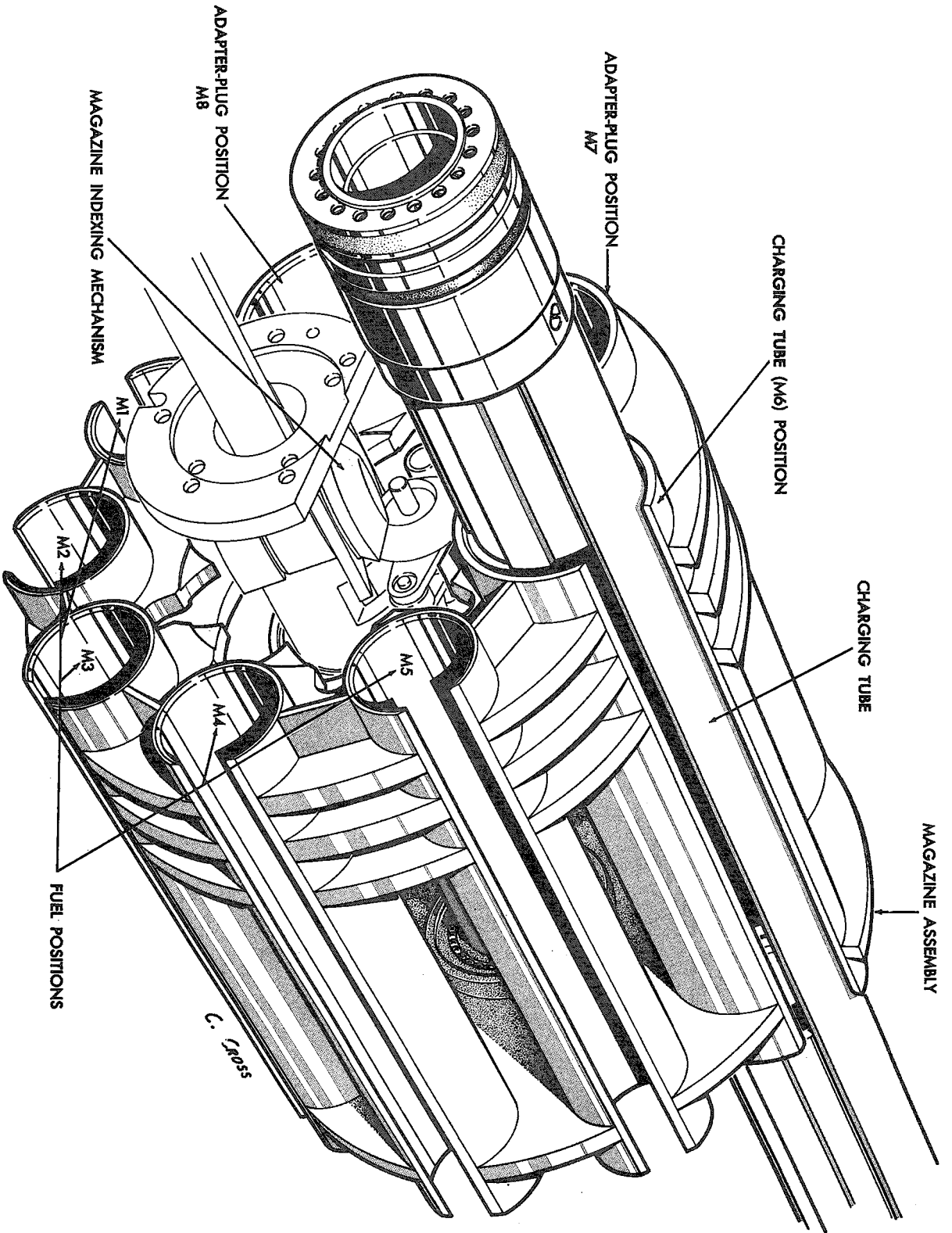
MAGAZINE INDEXING, AT MID-POSITION



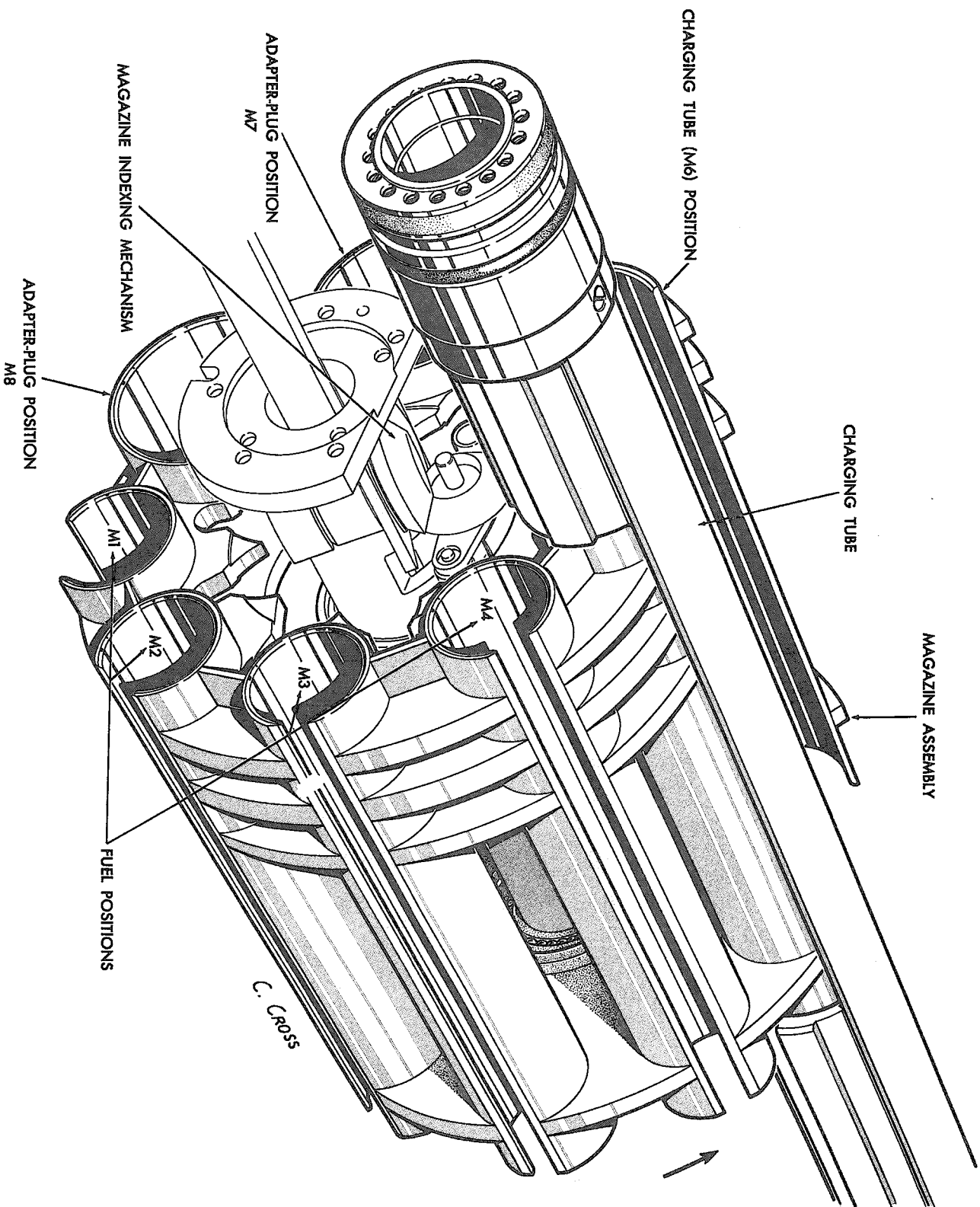
Magazine has moved on one position and is once again in the "geometric lock" position.



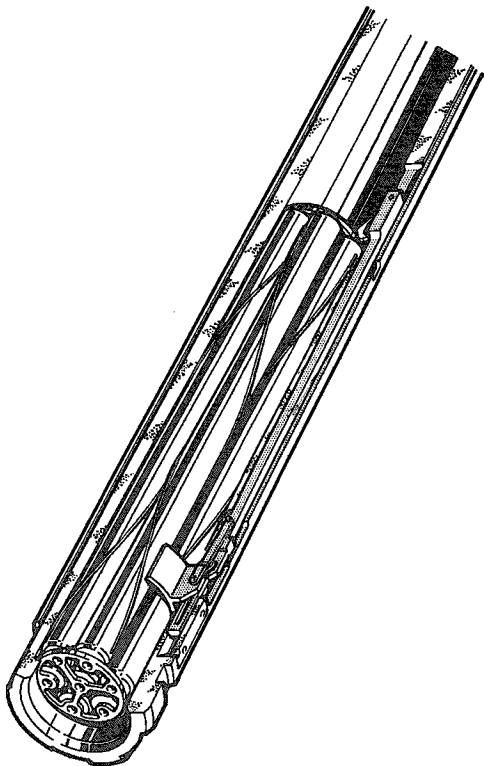
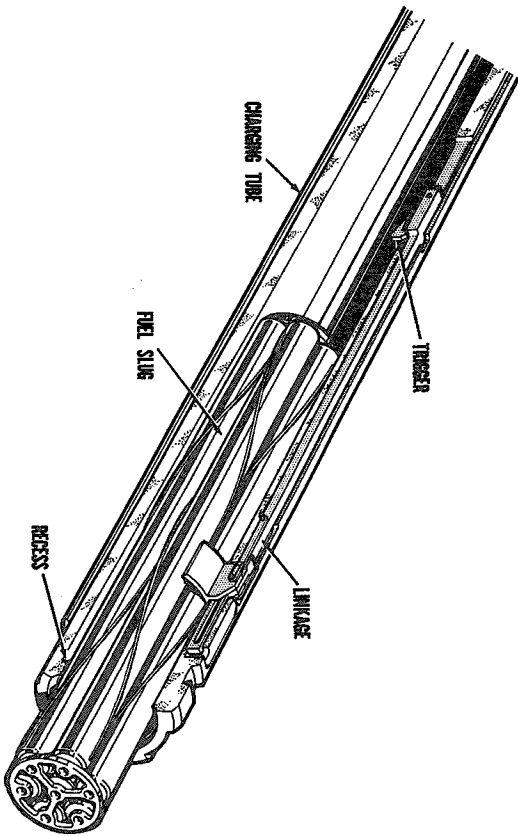
MAGAZINE INDEXING, OPERATION COMPLETE



CHARGING TUBE IN C5-A5 POSITION, MAGAZINE AT M6 POSITION READY TO INDEX TO FUEL POSITION

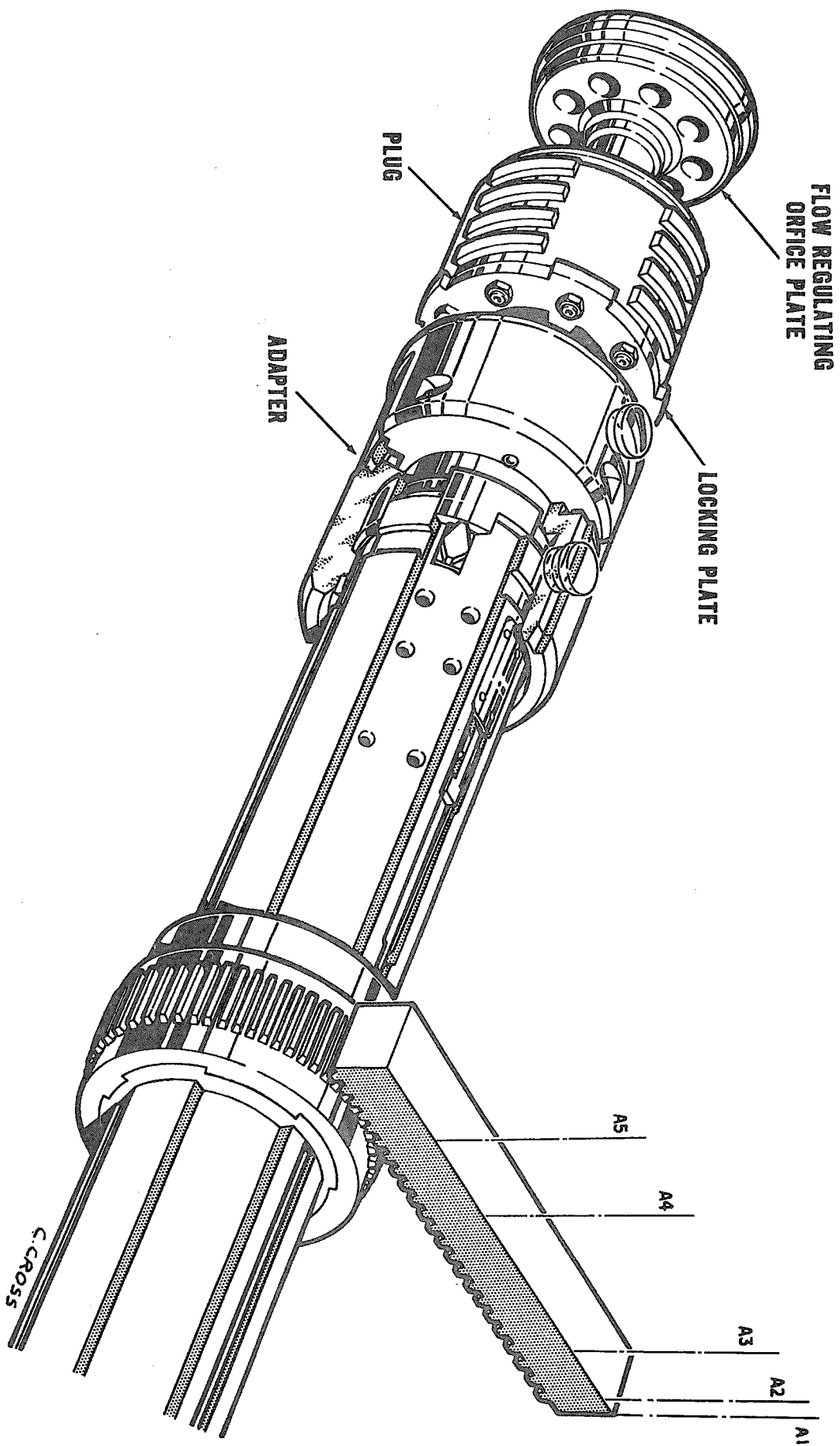


MAGAZINE HAS ROTATED THROUGH CHARGING TUBE CUT-OUT SECTION TO M5 FUEL POSITION



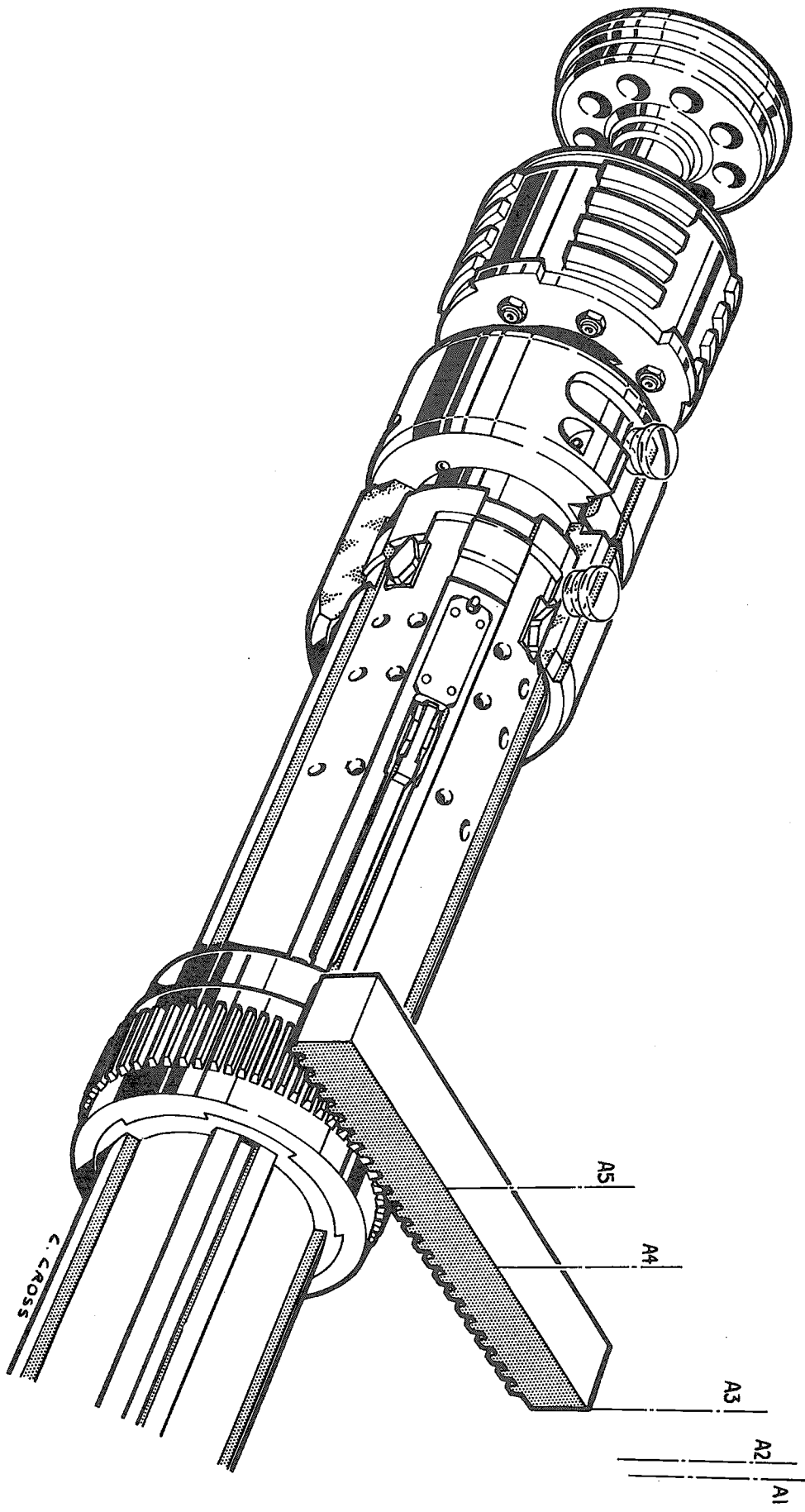
FORWARD MOTION OF SLUG ACTIVATES THROTTLE WHICH ACTS VIA LINKAGE TO REPRESS REAR OF SLUG INTO RECESS IN CHARGING TUBE. THE RECESS ENSURES THAT THE SLUG WILL NOT BE LEFT BEHIND WHEN THE CHARGING TUBE WITHDRAWS.

**CHARGING TUBE OF RECEIVING MACHINE IN THE C5-A1 POSITION
ACCEPTING SPENT FUEL SLUG**

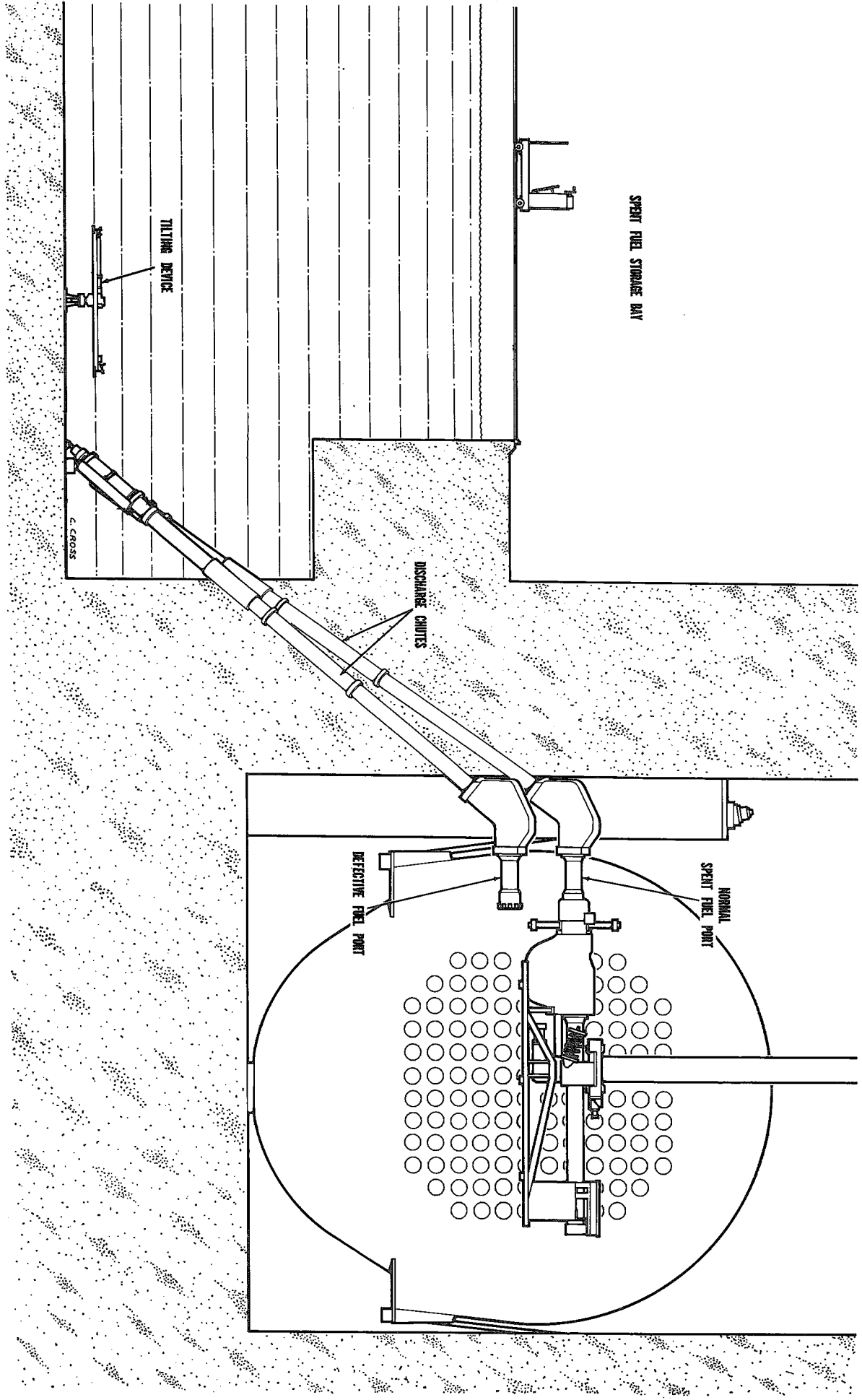


PLUG AT DOWNSTREAM END OF CHANNEL SHOWN SECURED TO ADAPTER

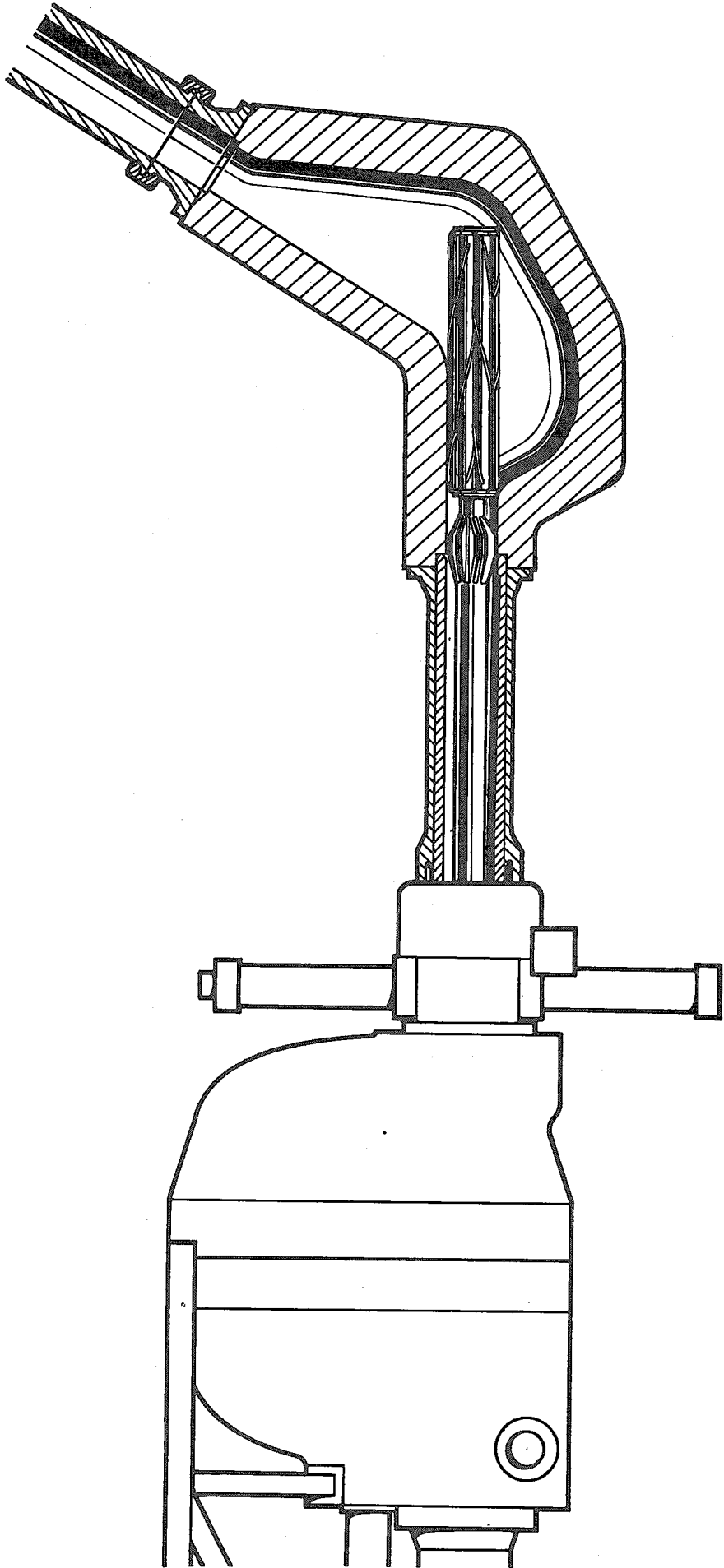
L-1743



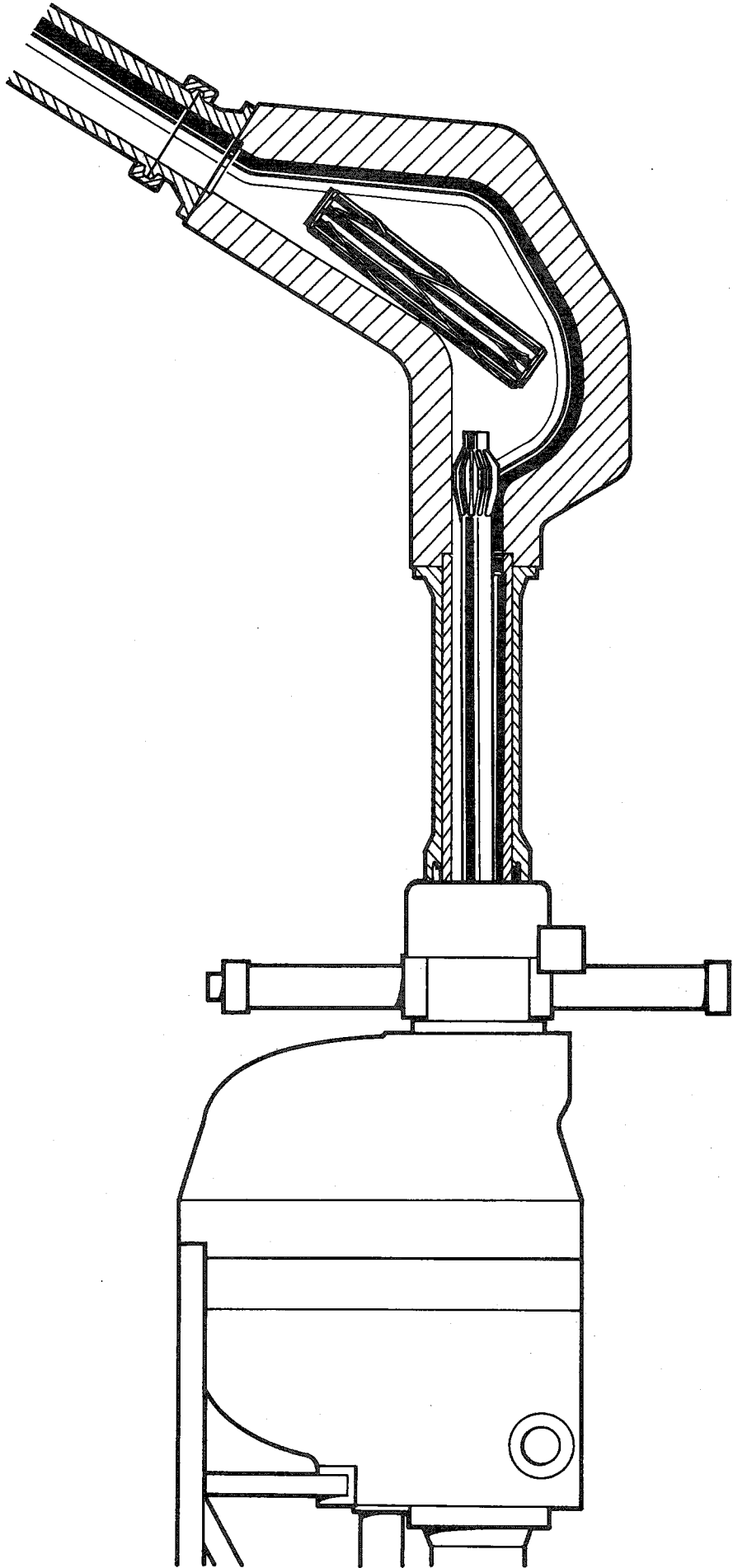
F/M 44

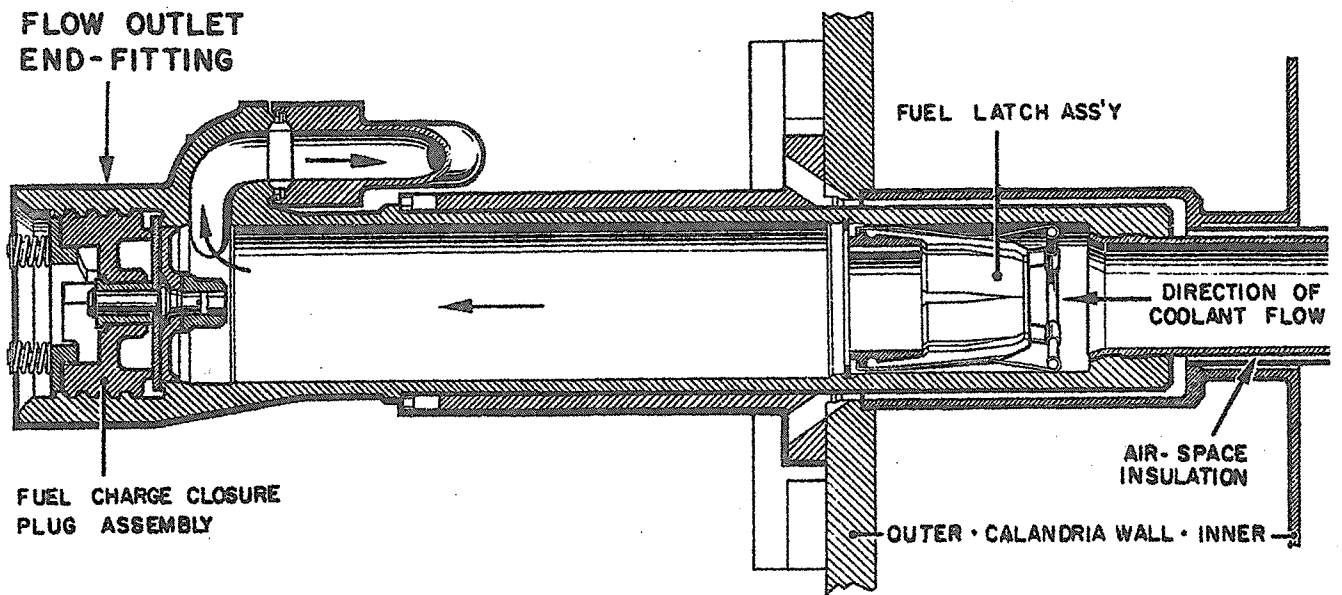
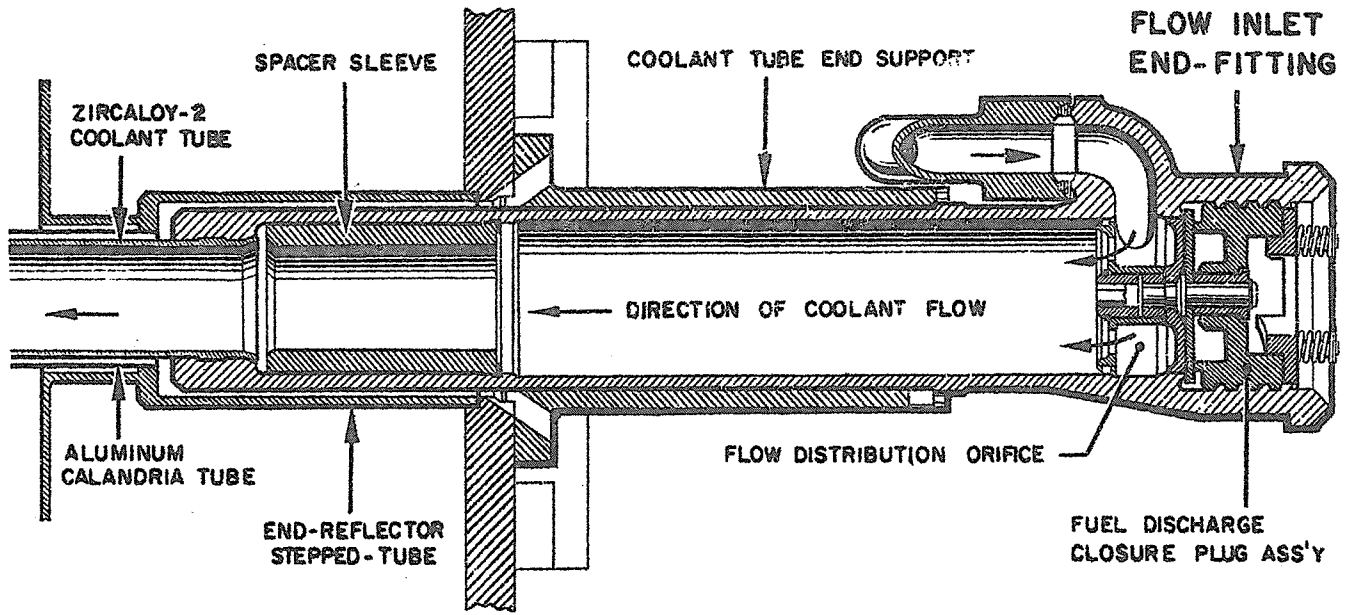


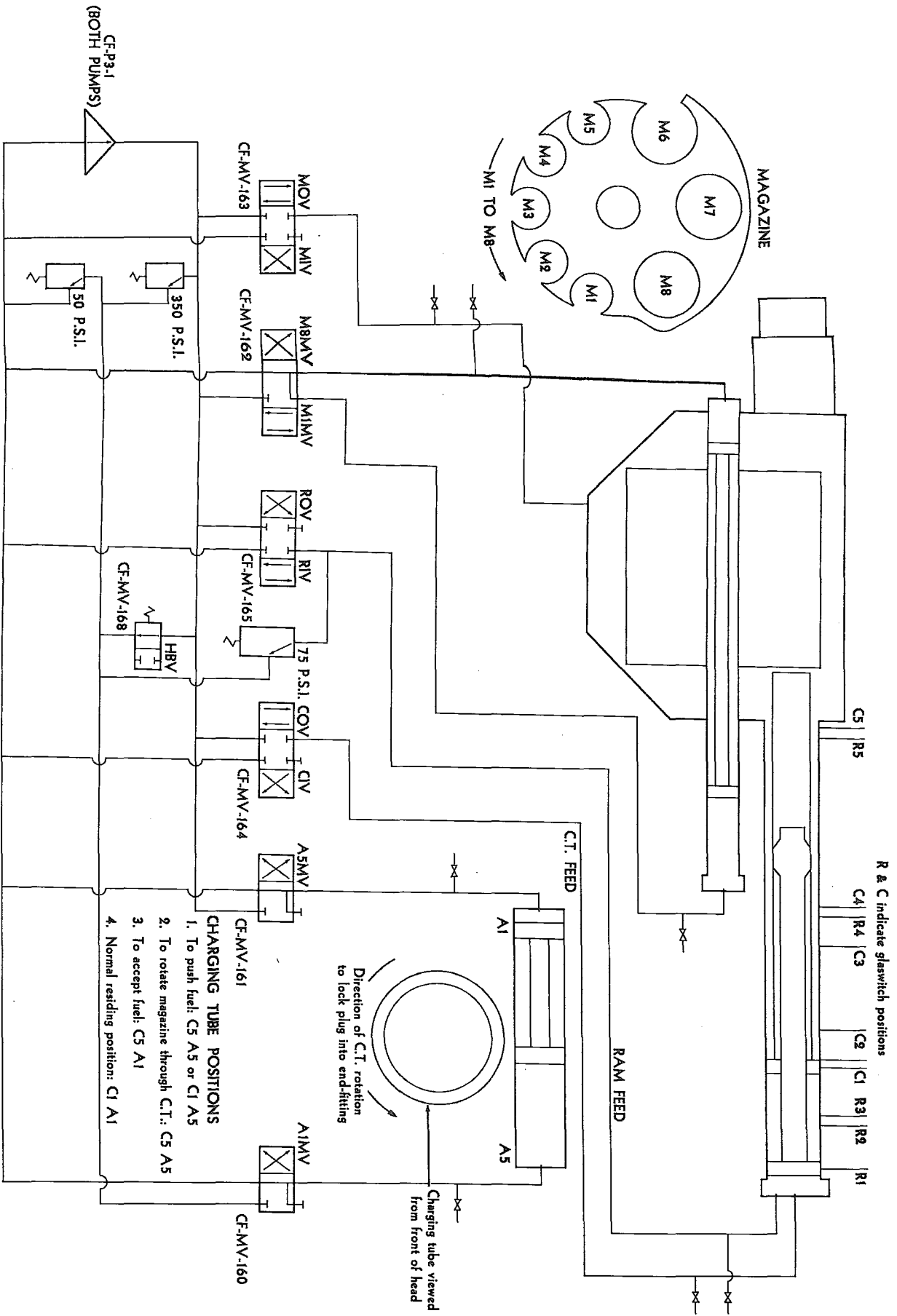
FUELING MACHINE AT SPENT FUEL PORT



F/MS4







R & C indicate glass switch positions

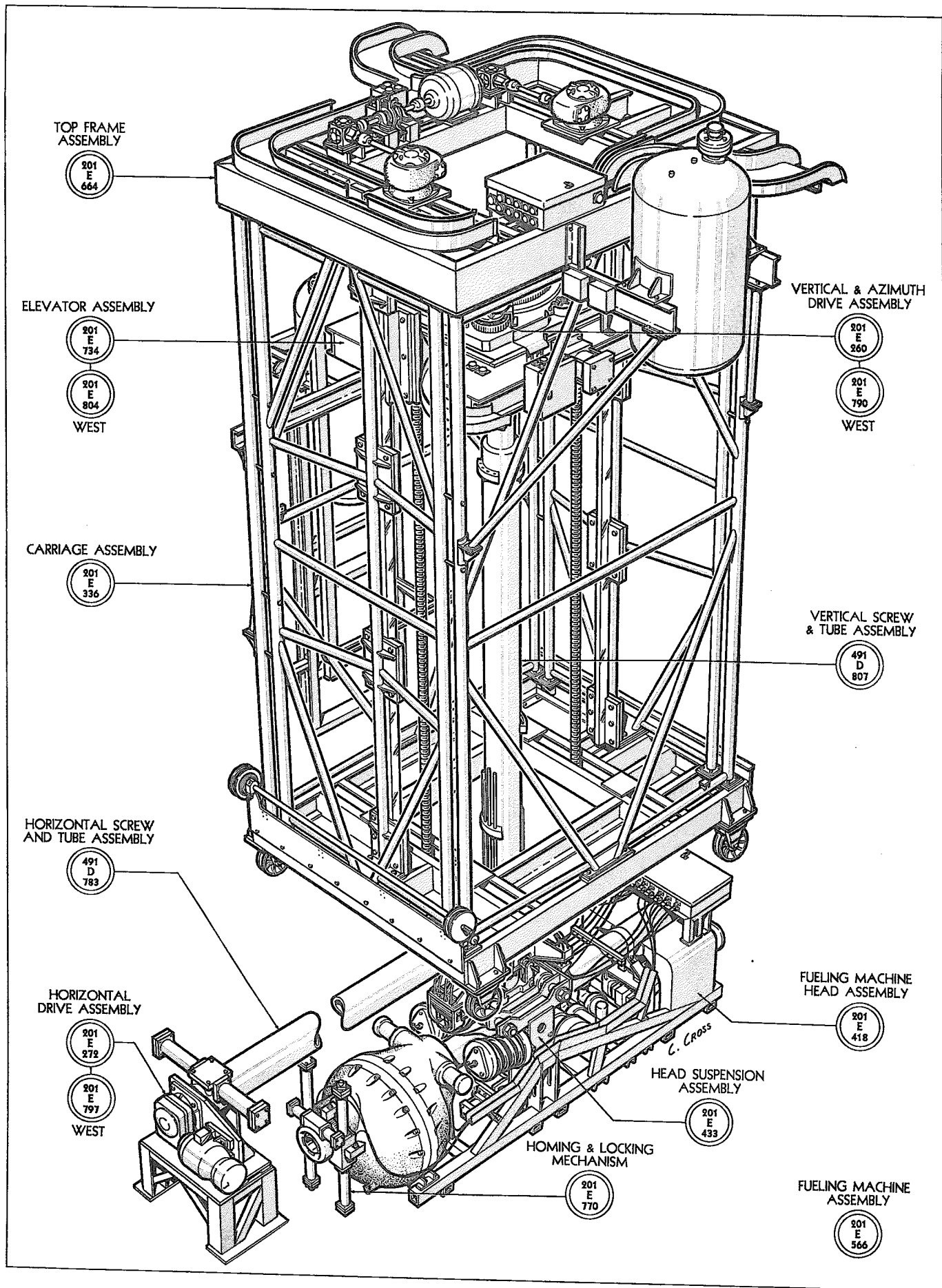
Direction of C.T. rotation
to lock plug into end-fitting

Charging tube viewed
from front of head

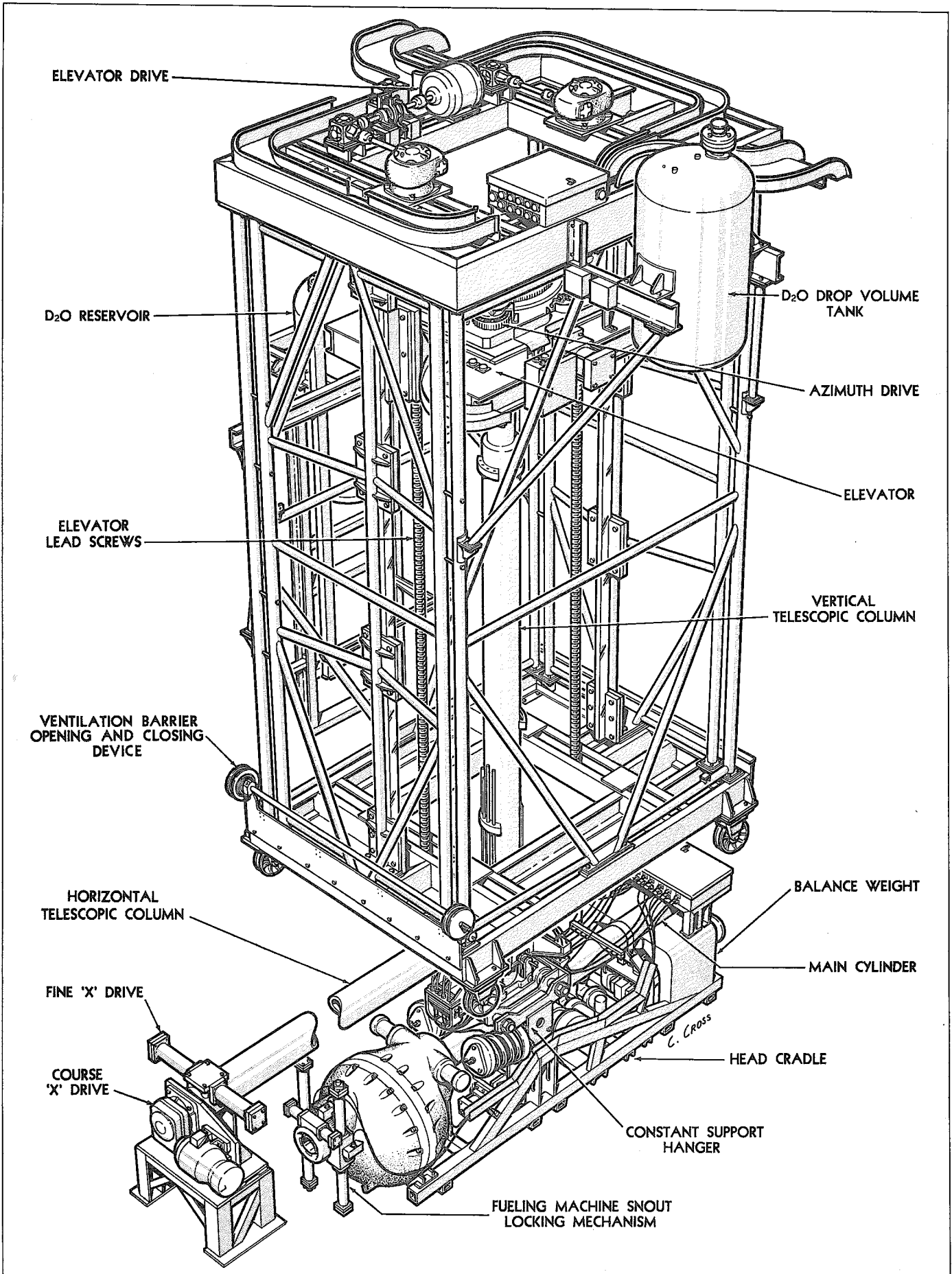
CHARGING TUBE POSITIONS

1. To push fuel: C5 A5 or C1 A5
2. To rotate magazine through C.T.: C5 A5
3. To accept fuel: C5 A1
4. Normal residing position: C1 A1

FUELING MACHINE HEAD HYDRAULIC SYSTEM



EAST FUELING MACHINE ASSEMBLY



ELEVATOR DRIVE

D₂O RESERVOIR

ELEVATOR
LEAD SCREWS

VENTILATION BARRIER
OPENING AND CLOSING
DEVICE

HORIZONTAL
TELESCOPIC COLUMN

FINE 'X' DRIVE

COURSE
'X' DRIVE

D₂O DROP VOLUME
TANK

AZIMUTH DRIVE

ELEVATOR

VERTICAL
TELESCOPIC COLUMN

BALANCE WEIGHT

MAIN CYLINDER

HEAD CRADLE

CONSTANT SUPPORT
HANGER

FUELING MACHINE SNOOT
LOCKING MECHANISM

FUELING MACHINE HEAD AND CARRIAGE ASSEMBLY

HOMING & LOCKING MECHANISM

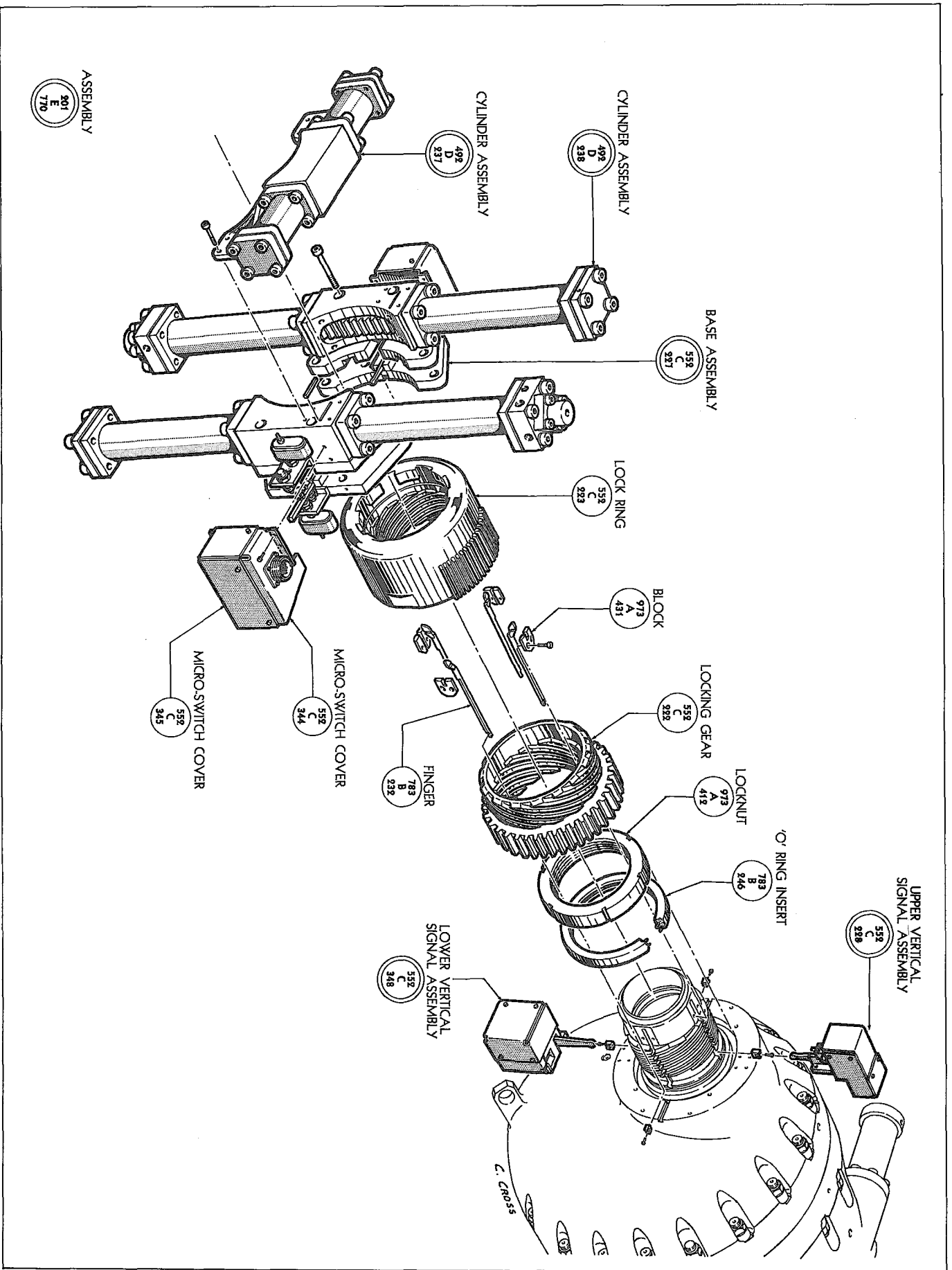


FIG 2

MAGAZINE HOUSING & INTERNAL EQUIPMENT

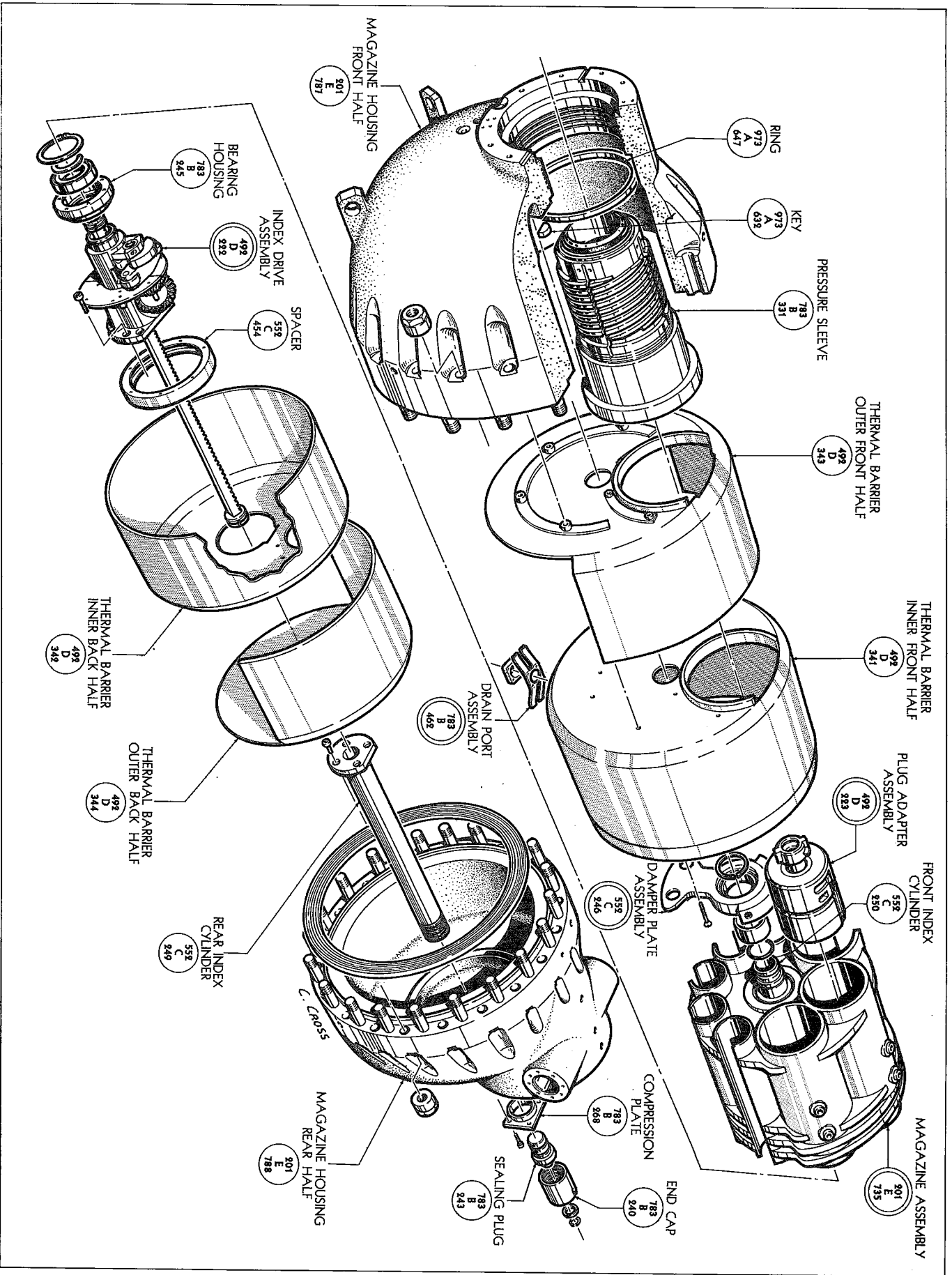
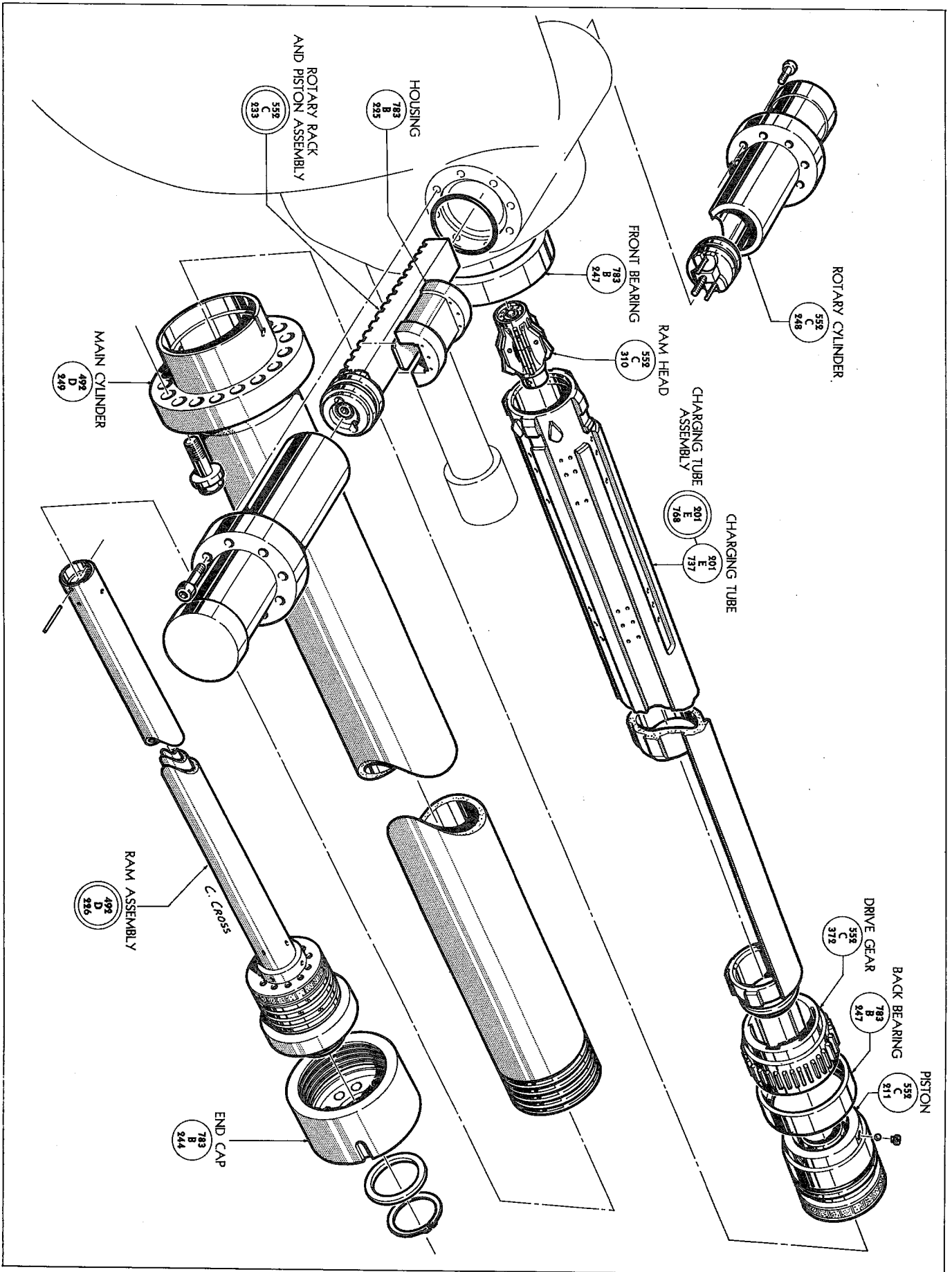
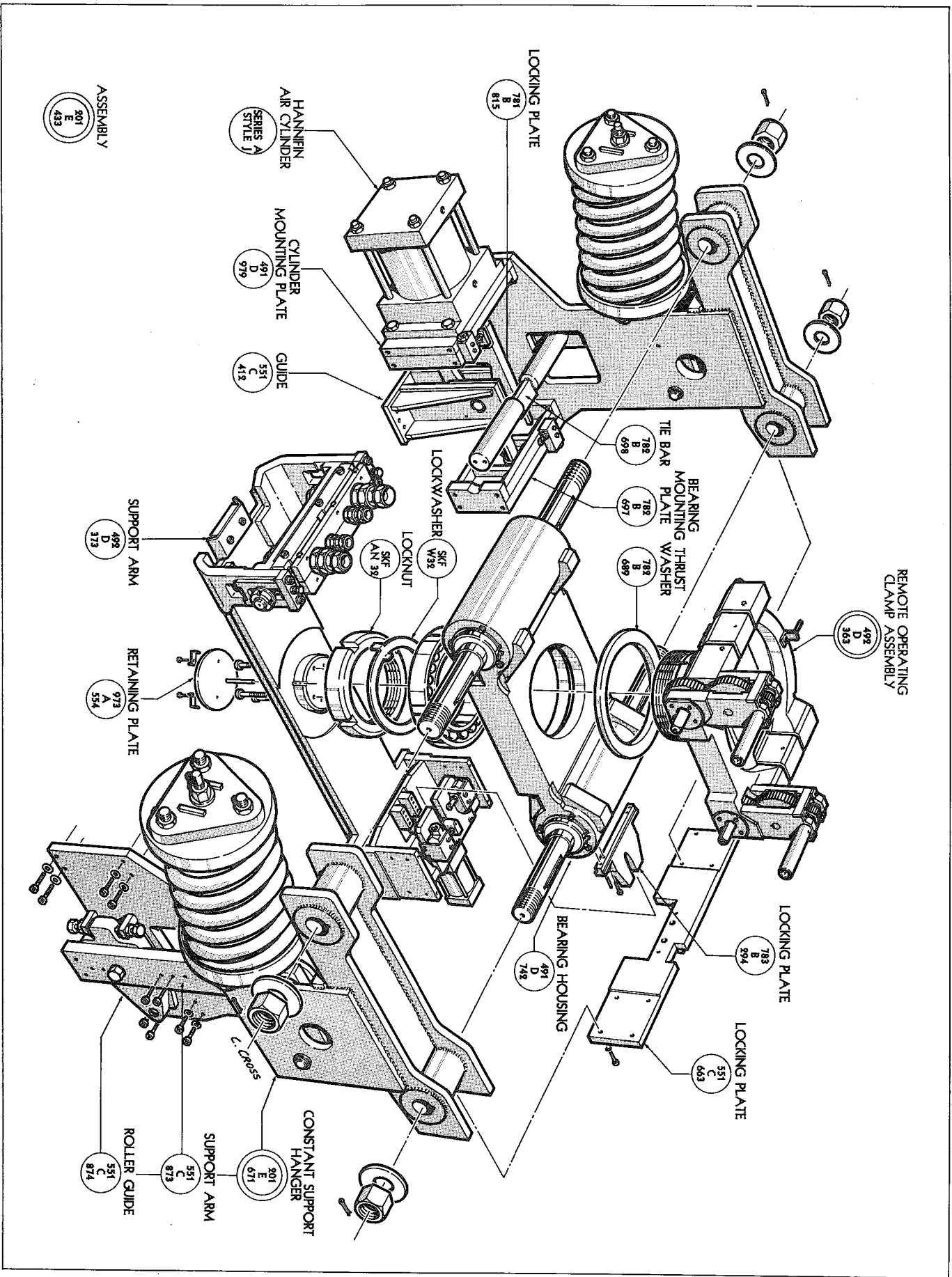


FIG 3



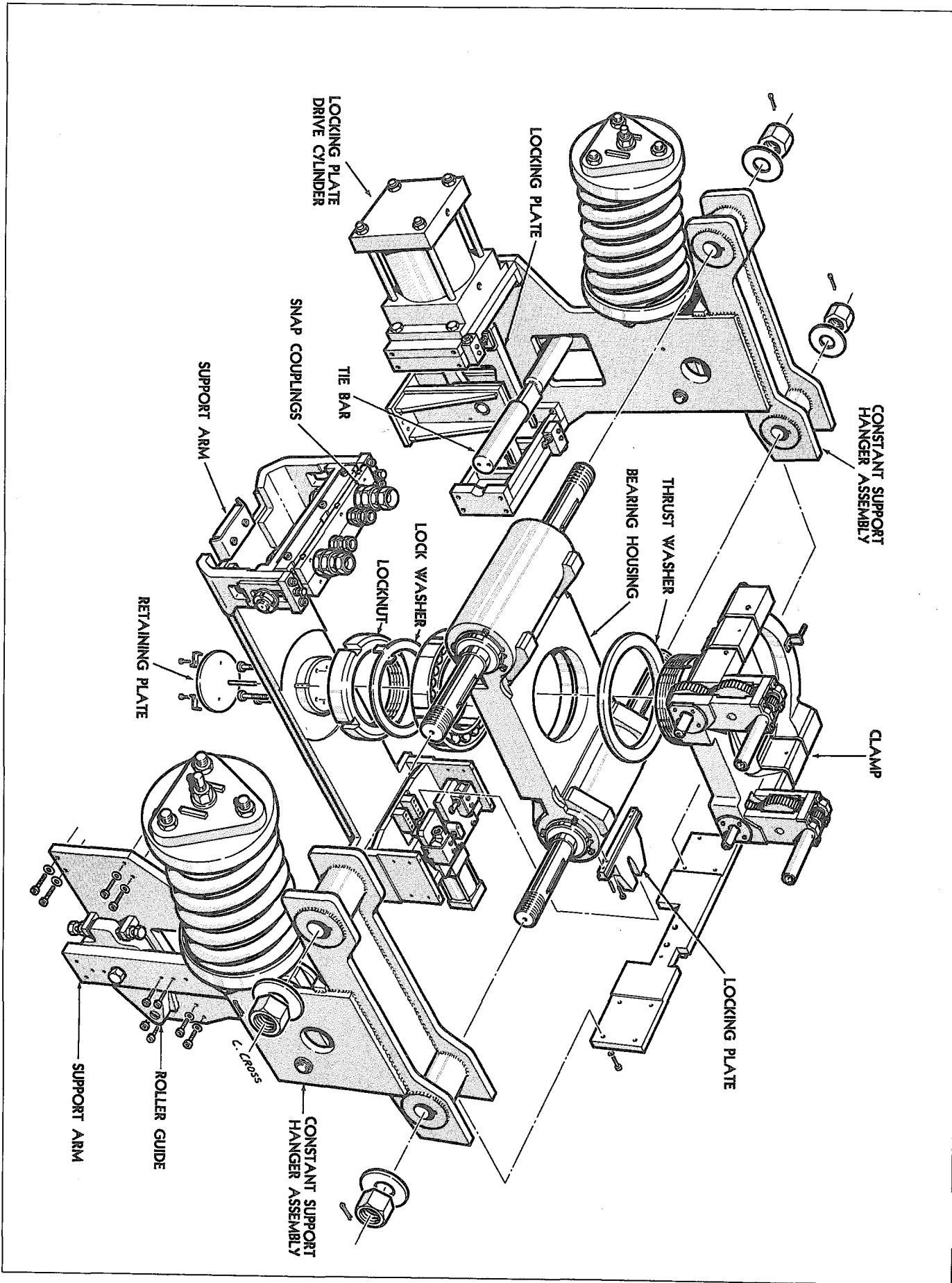
MAIN CYLINDER & INTERNAL EQUIPMENT

FIG 4



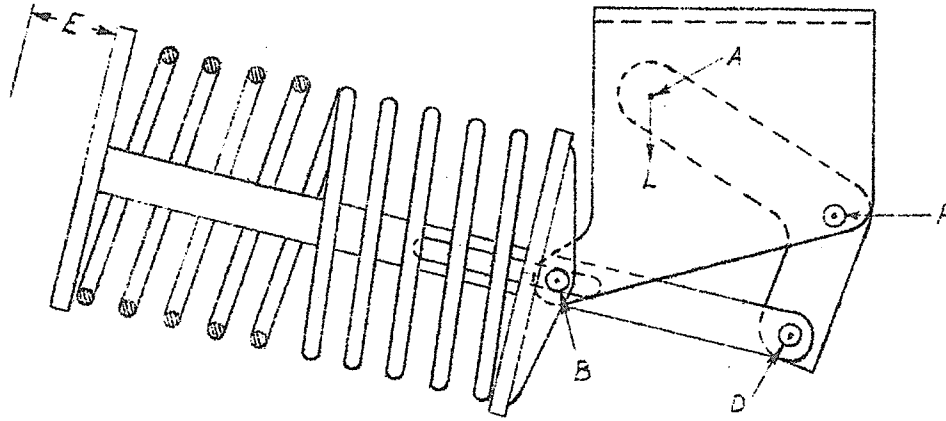
HEAD SUSPENSION

FIG 3

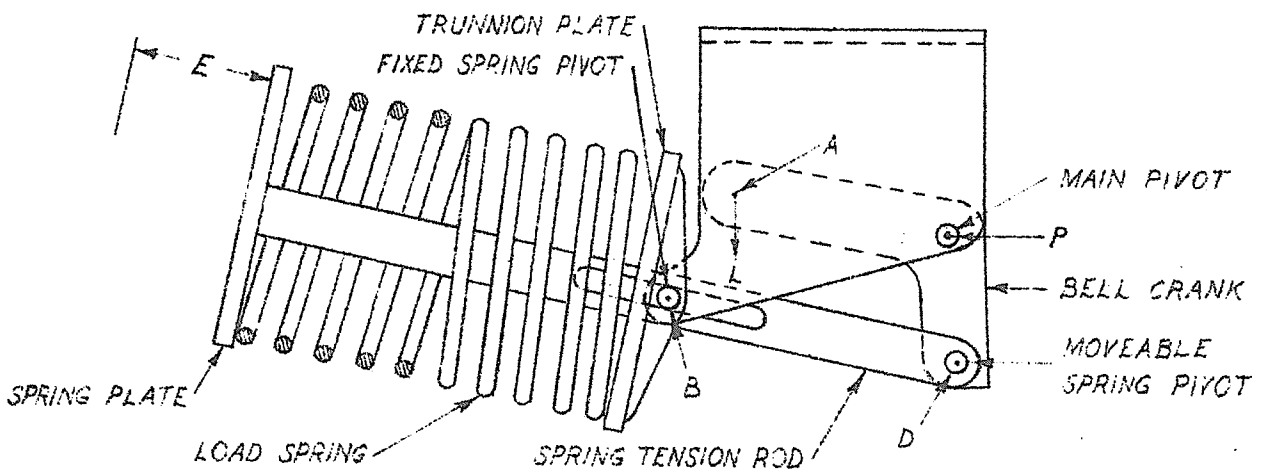


HEAD SUSPENSION ASSEMBLY

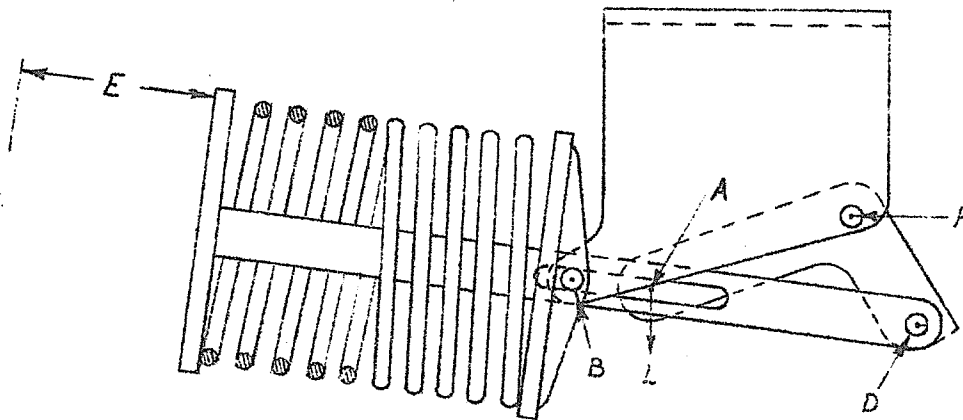
CONSTANT SUPPORT HANGER



HIGH POSITION



MID POSITION



LOW POSITION

HEAD SUPPORT & ASSOCIATED PARTS

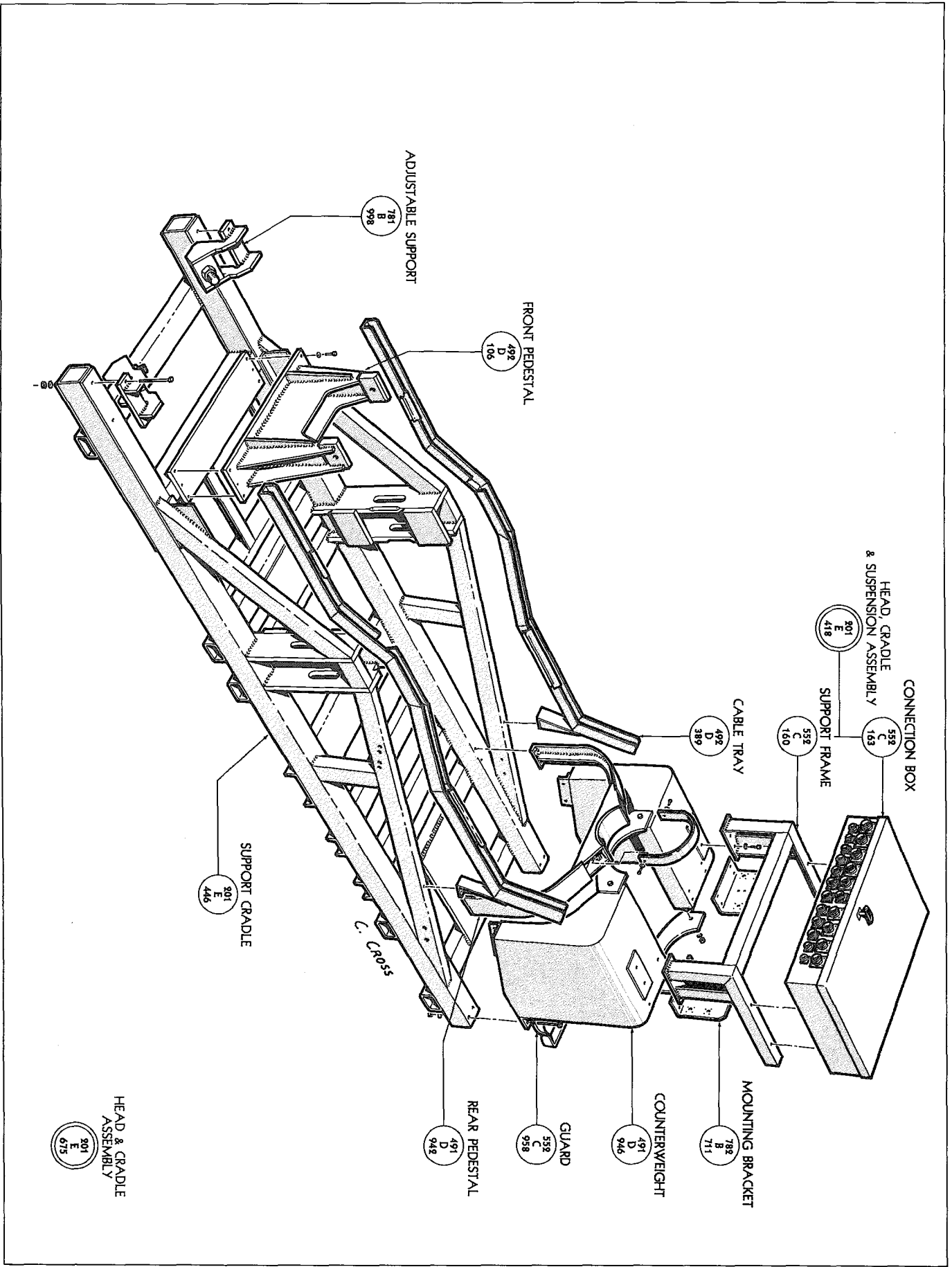
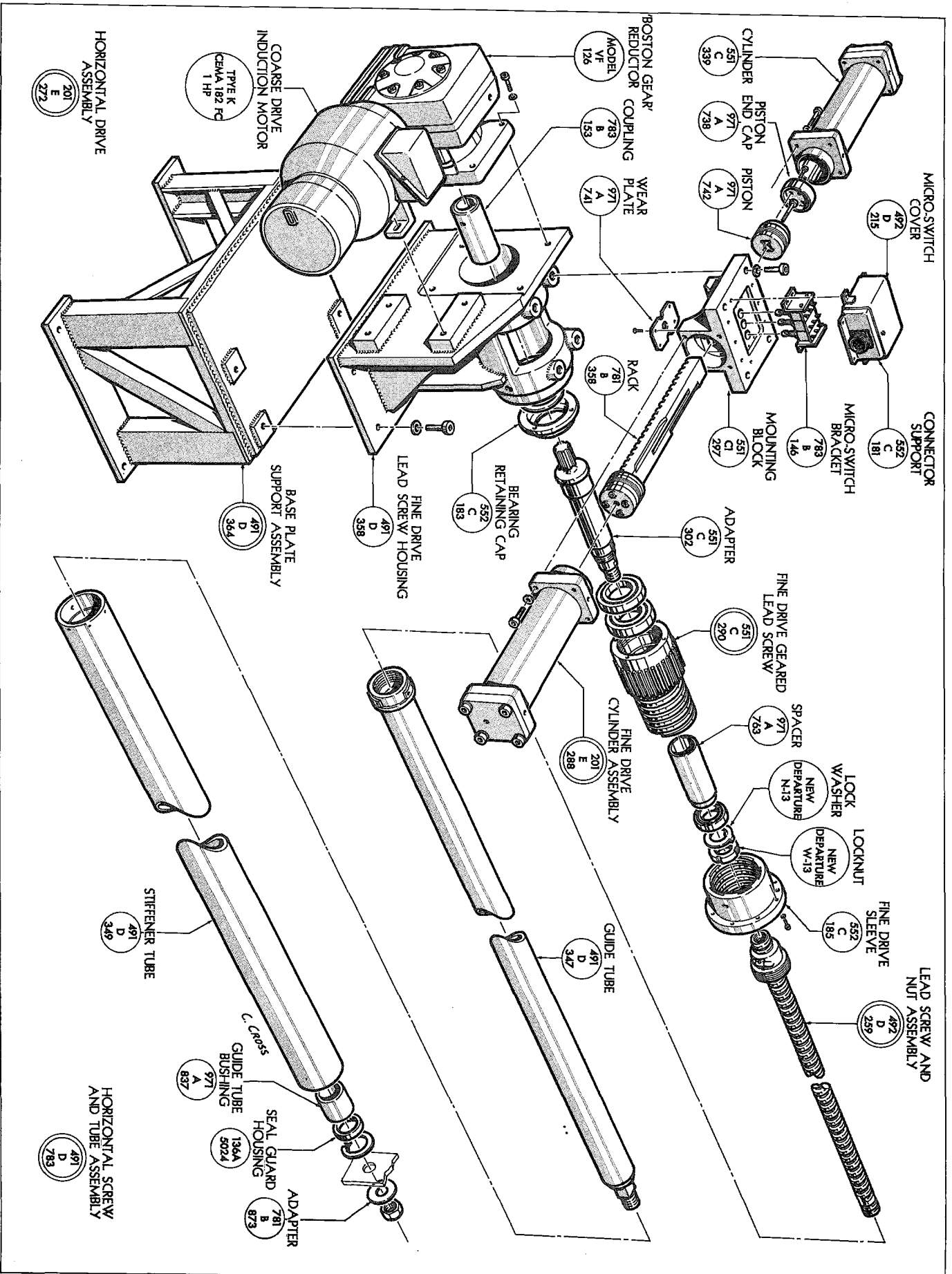
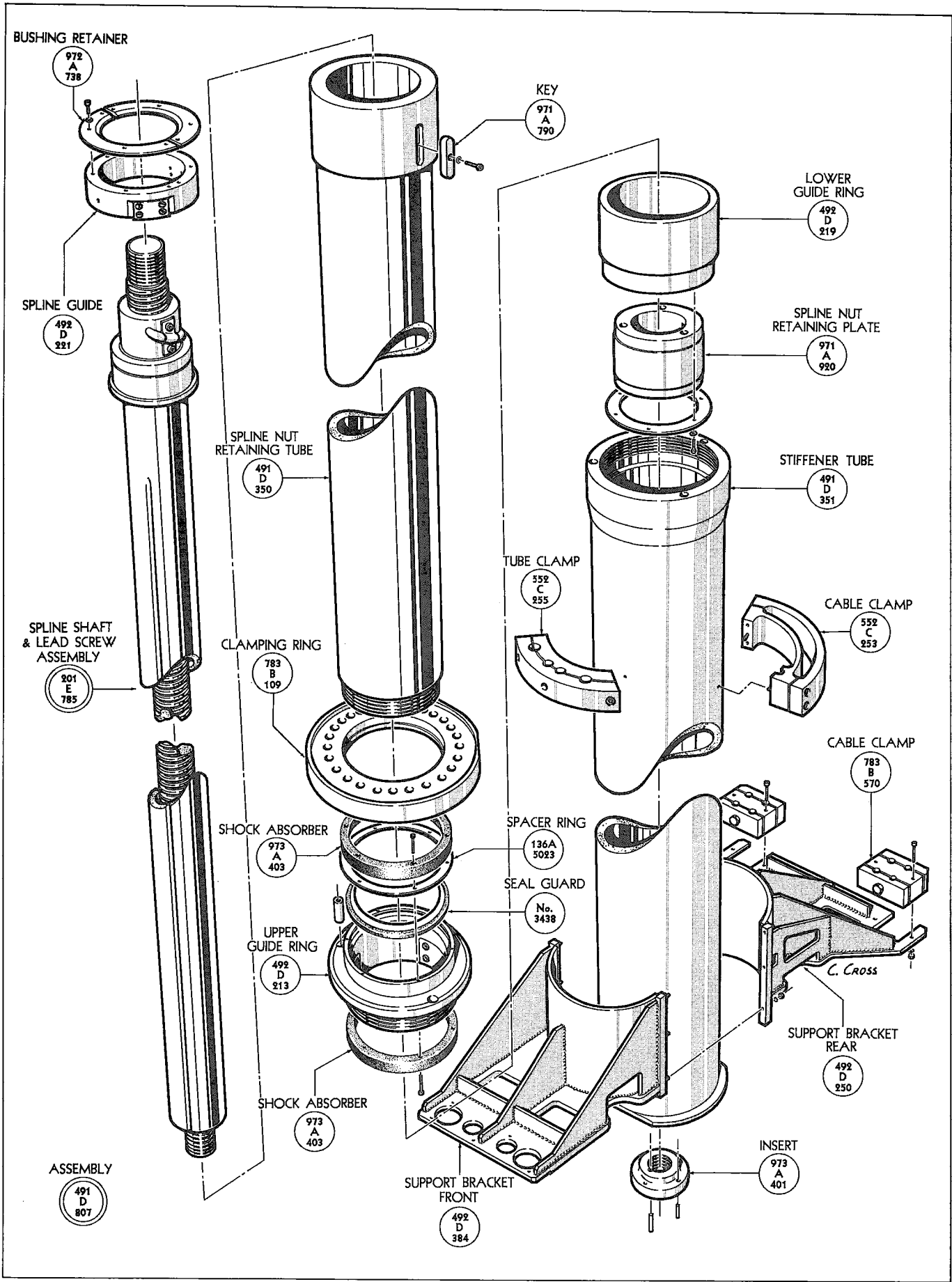


FIG 6

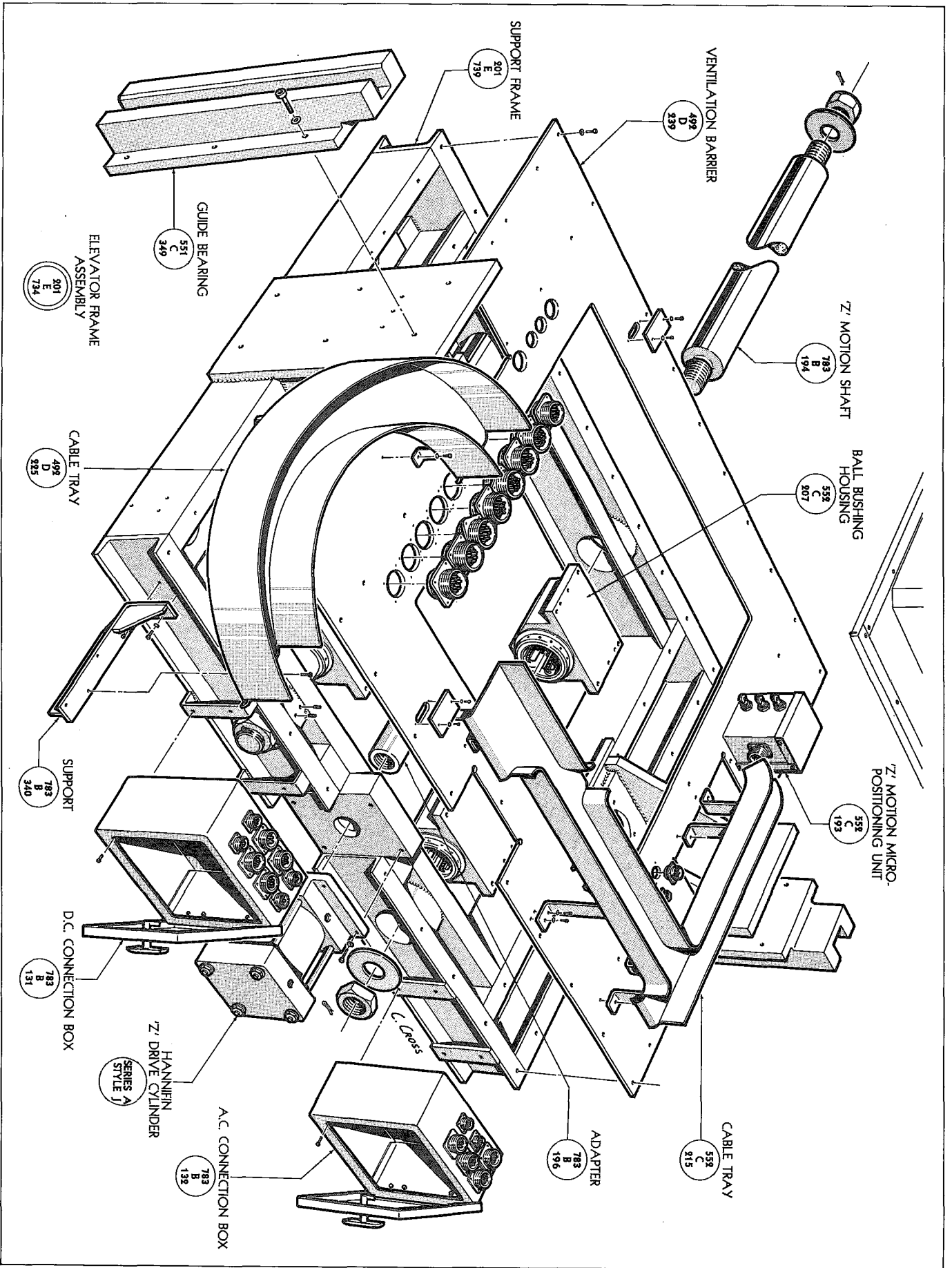


HORIZONTAL DRIVE & TELESCOPIC TUBE

FIG 7

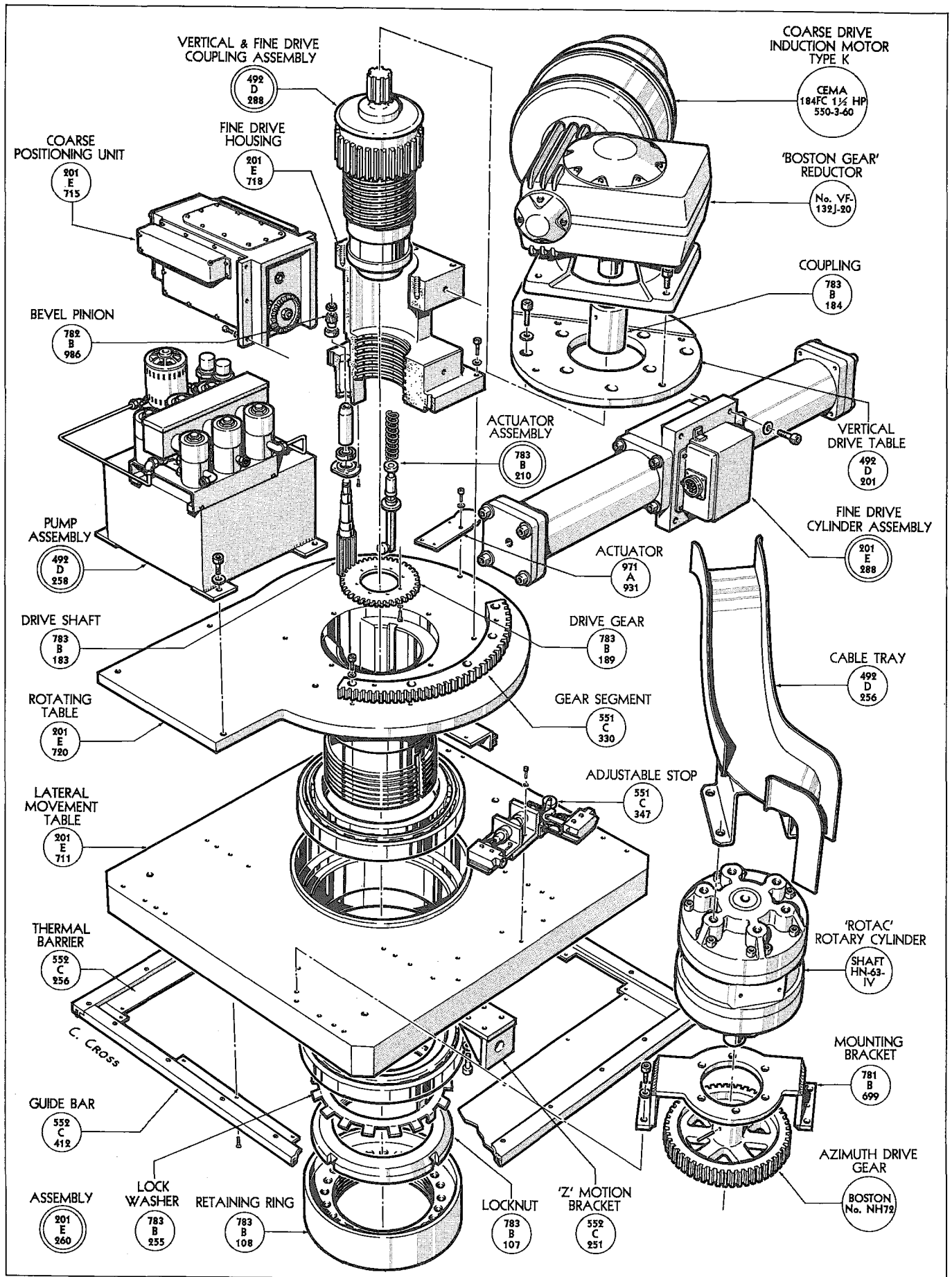


VERTICAL SCREW & TELESCOPIC TUBE

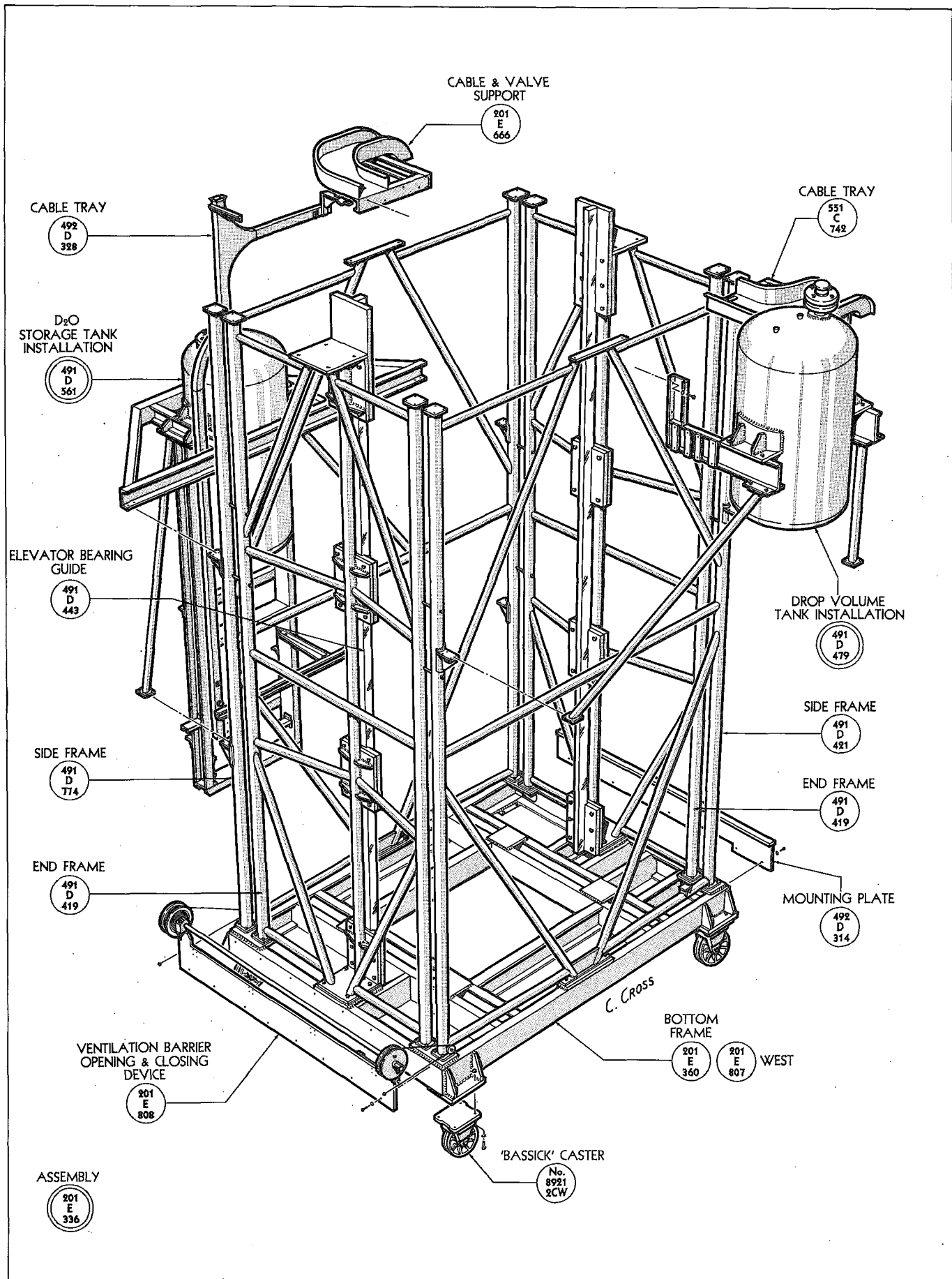


ELEVATOR FRAME

FIG 9

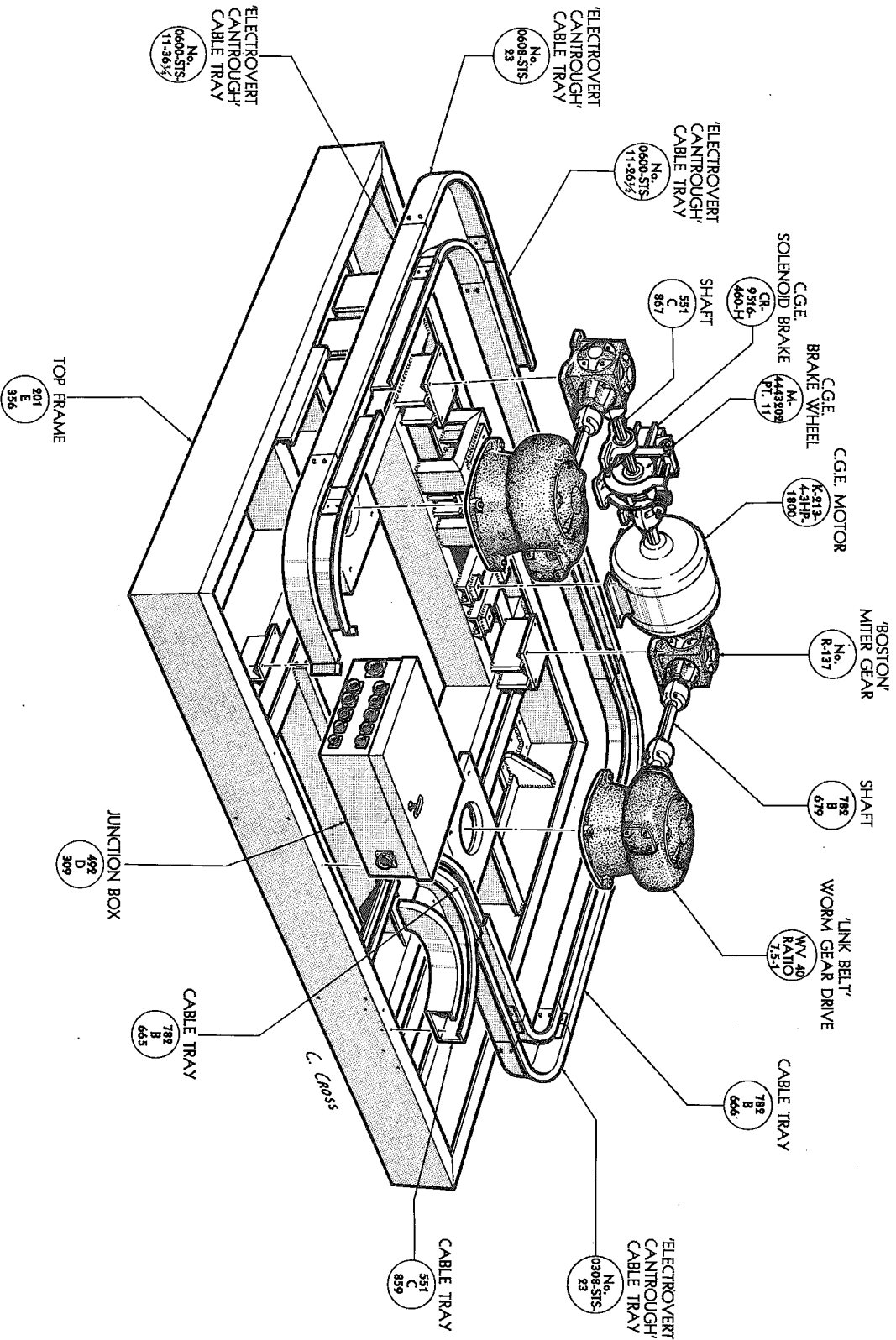


VERTICAL & AZIMUTH DRIVE



CARRIAGE

ASSEMBLY



TOP FRAME

FIG 12