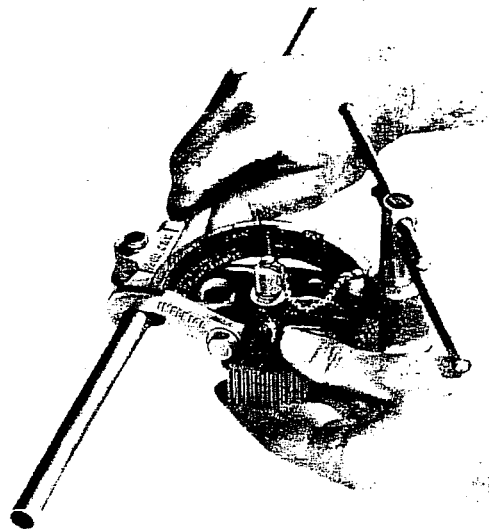
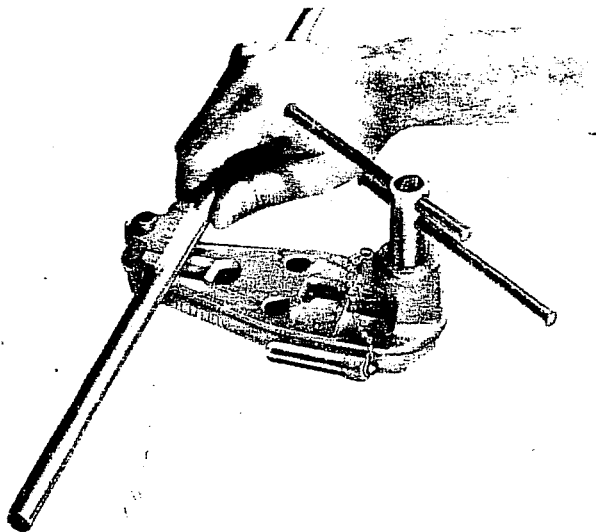


# Imperial Universal Gear-Type Tube Bender

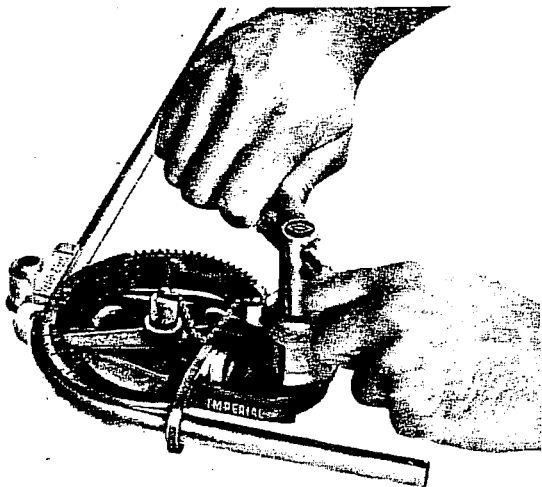
This gear-type tube bender can be held in the hand, clamped in a bench vise or bolted to a bench. It can be used with a pipe vise through the use of Extension Handle No. 271-F. Bends any type of tubing including hard drawn copper, hard temper, heavy wall steel, stainless steel, aluminum and brass

tubing. Can be used for bending iron pipe, using size which is nearest to that of pipe to be bent. Will make right or left hand bends, return bends, offset bends, right angle bends, etc. A separate bender is used for each size of tubing.



1 Place tube bender body and shoe in position on tubing.

2 Geared forming wheel is then placed on bender body, and is held in place with center pin which should be inserted in left hand hole. Drop hook in place over tubing.



3 Turn handle clockwise until desired degree of bend is obtained. Handle may be extended to full width to give maximum leverage. To remove bent tubing pull out center pin, thus releasing forming wheel and tubing.

BENDING RADII				
Cat. No.	O.D. of Tube	Nominal Tube Size	Bending Radius to Center of Tube	Minimum Return or coil bend from center to center of Tubing
270-F	3/8"	1/4"	1 3/4"	4 1/2"
270-F	1/2"	3/8"	2 1/2"	6"
270-F	5/8"	1/2"	3"	7 1/2"
270-F	3/4"	5/8"	4"	9 1/2"
270-F	7/8"	3/4"	4"	9 1/2"
270-F	1"	7/8"	4"	9 1/2"
270-F	1 1/8"	1"	4"	9 1/2"

FOR MAKING LEFT HAND BENDS, turn forming wheel over and hold in place by dropping center pin in right hand hole. Turn handle counter-clockwise.

**IMPORTANT:** Lubricate pinion, center pin and inner surface of shoe with oil or grease. This is especially important for hard-to-bend steel or heavy wall, hard temper tubing as it will make bending easier.

# GUIDE FOR MAKING DIMENSIONAL BENDS WITH IMPERIAL UNIVERSAL GEAR-TYPE TUBE BENDERS

TO OBTAIN "X" DIMENSION, TUBE SHOULD BE PLACED  
B IN BENDER AS ILLUSTRATED IN FIGURES 1 AND 2

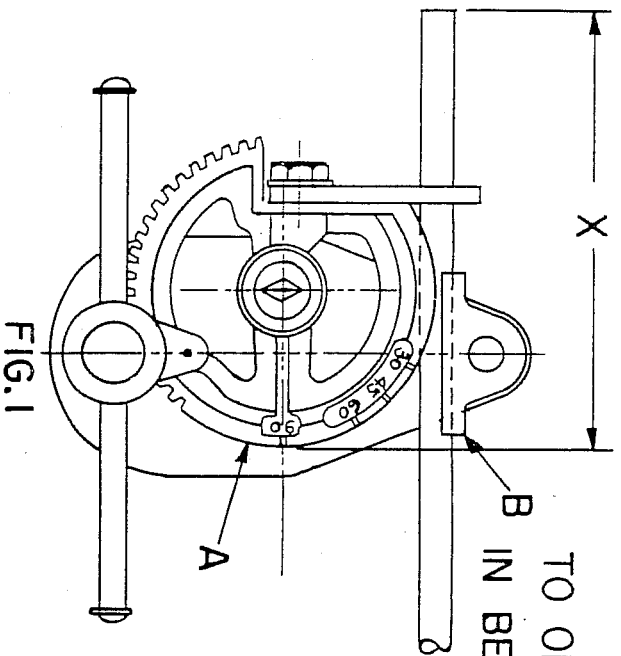
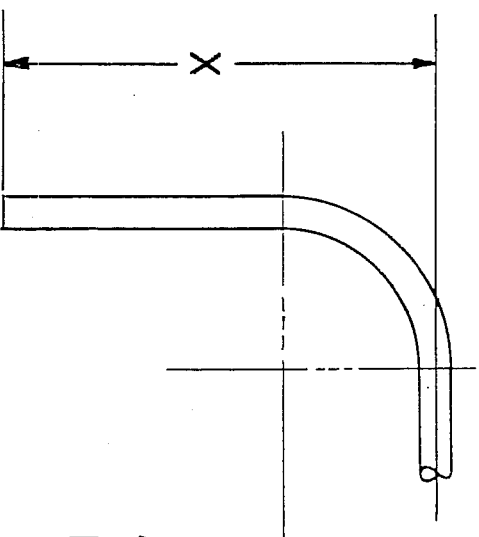


FIG. 1



A- MANDREL  
B- SHOE

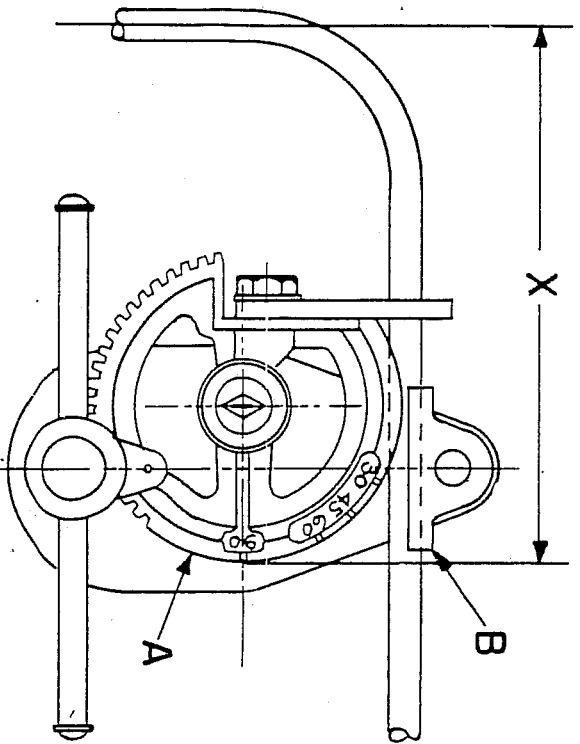


FIG. 2

