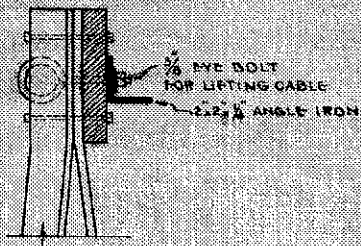


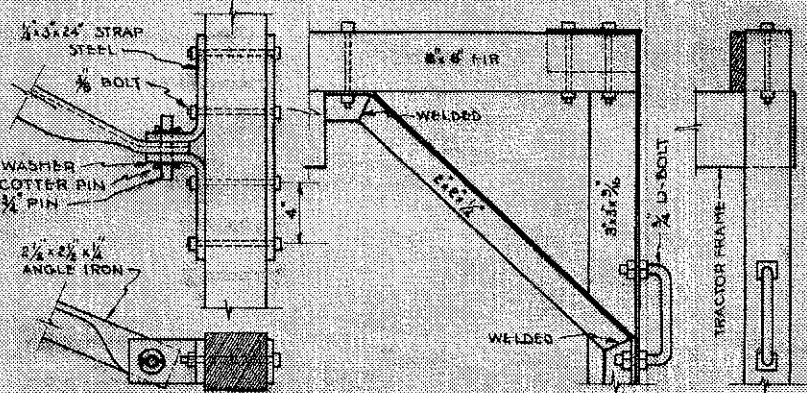
USE 2" PIPE, DOUBLE EXTRA HEAVY, AND REINFORCE FROM X' TO Y' BY A 2x2 1/2" ANGLE WELDED TO THE PIPE. USE STEEL BOLTS AND PINS.

DISTANCE E' SHOULD BE ENOUGH TO ENABLE OPERATOR TO TURN STARTING CRANK, & NO MORE.
LEVER
LIFTING CABLE

DETAIL AT 'D'
SCALE 3-1-0

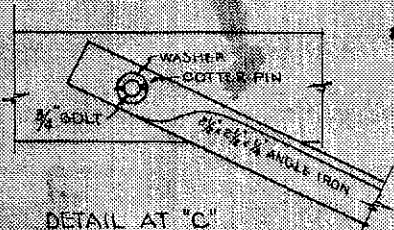


NOTE:
TEETH—USE STRAIGHT GRAINED TIR.
USE 2x2'S RIPPED INTO TWO PIECES TAPERING FROM 2x2 TO 2x1.
HOLES—BORE ALL HOLES INTO WOOD SLIGHTLY SMALLER THAN THE BOLT.

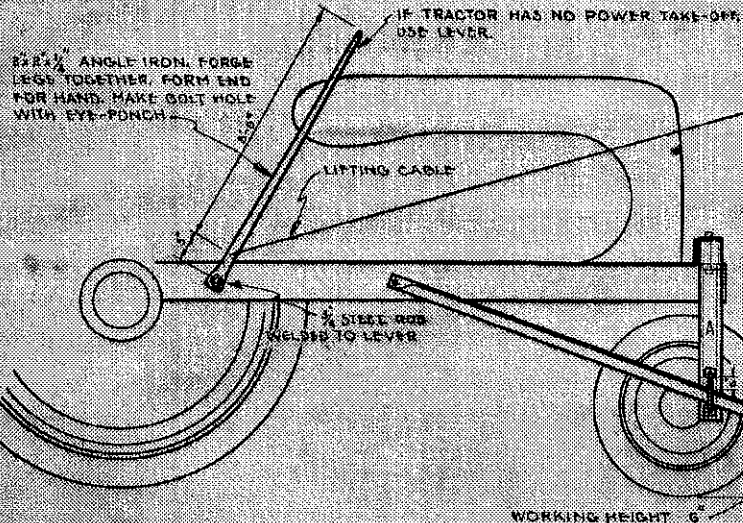
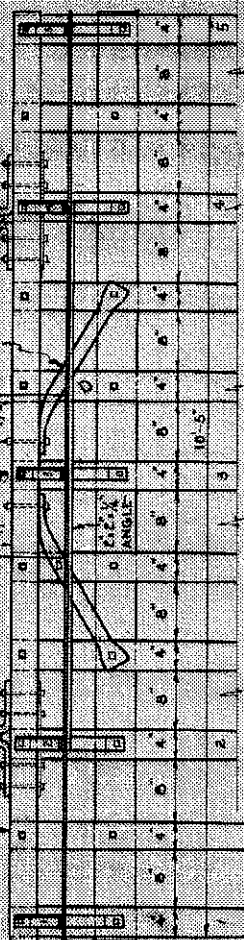


DETAIL AT 'B'
SCALE 2-1-0

DETAIL AT 'A'
SCALE 2-1-0

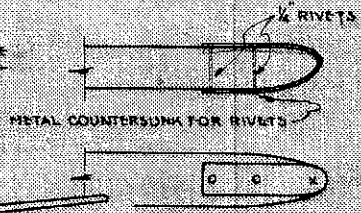


DETAIL AT 'C'
SCALE 3-1-0



WORKING HEIGHT 6"

HOME MADE POINTS MADE FROM A 1/2x1 1/2" PIECE OF STRAP IRON FORGED TO SHAPE SHOWN AT 'X'



HOME MADE POINTS

SCALE 1-1-0

COOPERATIVE EXTENSION WORK IN
AGRICULTURE AND HOME ECONOMICS
STATE OF NORTH DAKOTA
NORTH DAKOTA AGRICULTURAL COLLEGE
AND
U.S. DEPT. OF AGRICULTURE COOPERATING
EXT. AGR. ENGINEER PARKS, N. DAK.
TRACTOR SWEEP RAKE
PLAN NO. N. 5354-5-A. DRN BY J. L. DATE 5/1/43