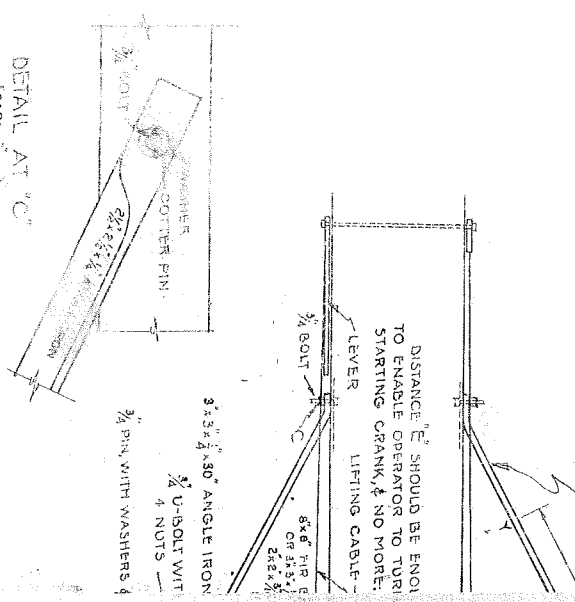


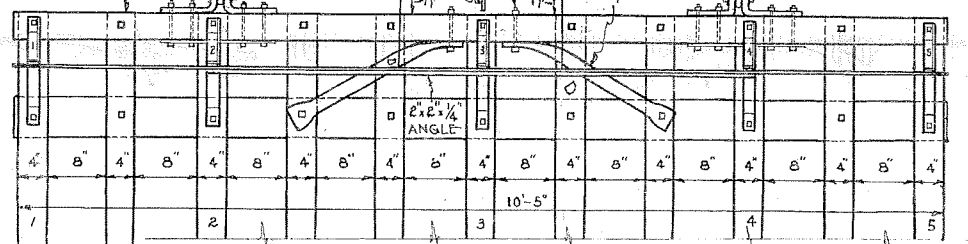
USE 2" PIPE, DOUBLE EXTRA HEAVY, AND FROM 3/4" TO 1" BY A 2"x2 1/2" ANGLE WELDED TO THE PIPE. USE STEEL BOLTS AND PINS.

DISTANCE "E" SHOULD BE ENOUGH TO ENABLE OPERATOR TO TURN STARTING CRANK, & NO MORE.

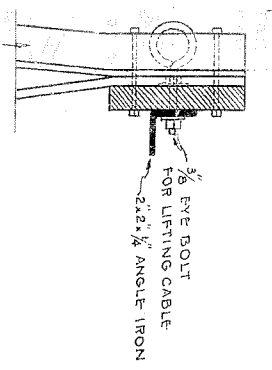
DETAIL AT "C"
SCALE 3"=1"



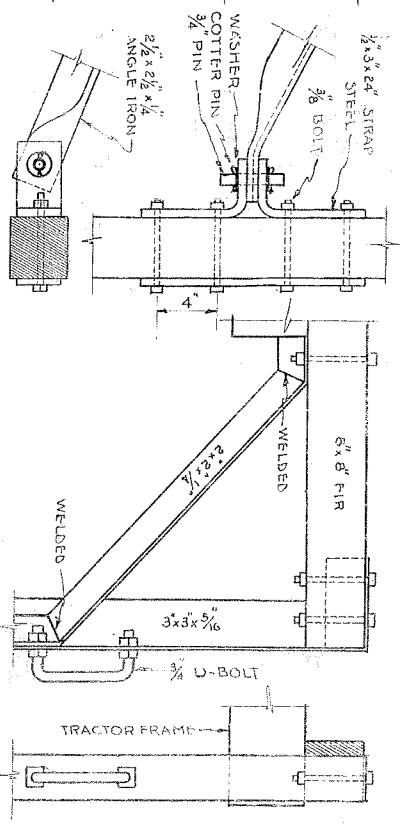
IF TRACTOR HAS NO USE LEVER.



DETAIL AT "D"
SCALE 3"x1"-0"



DETAIL AT "B"
SCALE 2"x1"-0"

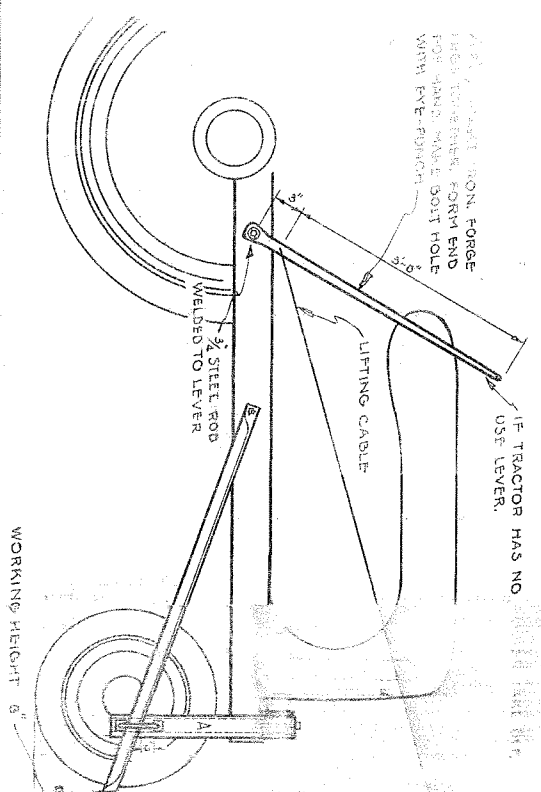


DETAIL AT "A"
SCALE 2"x1"-0"

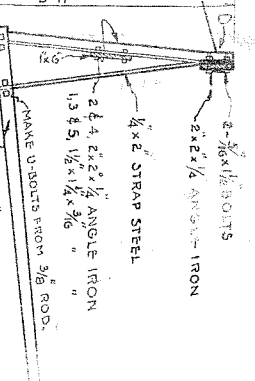


NOTE:
TEETH - USE STRAIGHT CRANED FIR. USE 2x6'S RIPPED INTO TWO PIECES TAPERING FROM 2x3 TO 2x2. HOLES - BORE ALL HOLES INTO WOOD SLIGHTLY SMALLER THAN THE BOLT.

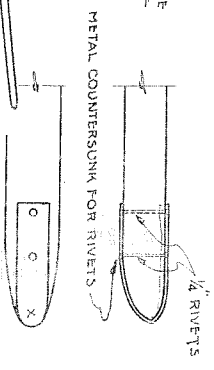
1 1/2" x 2" ANGLE IRON FORGE FOR HANDLE. MAKE FORK END WITH EYE-POUNCE



WORKING HEIGHT 6"



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



HOME MADE POINTS

SCALE 3"=1"

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 FARGO, N. DAK.
TRACTOR SWEEP RAKE
PLAN NO. N.D. 334-6-7. DON. BY DATE 6/1/33