

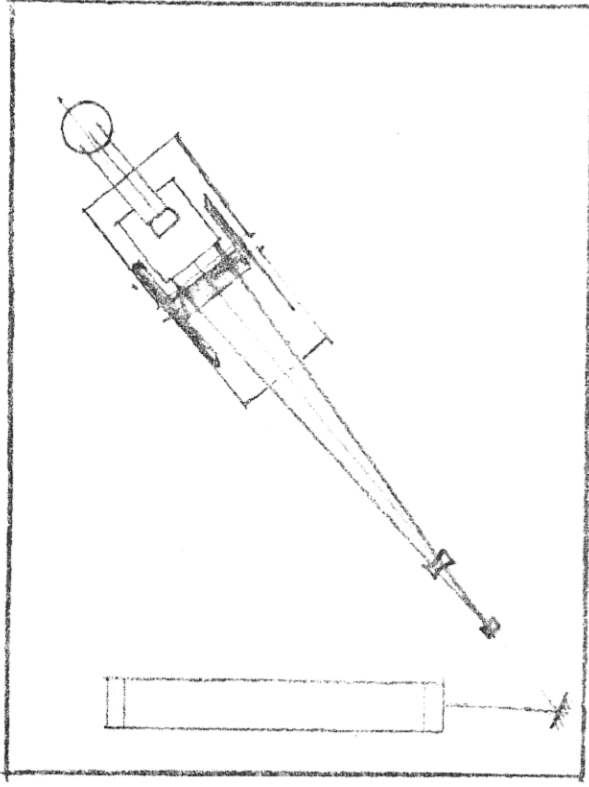
## notes

THIS SET UP HAS THE ADVANTAGE OF MORE STABILITY THAN THE HEAD ON SET UP BECAUSE ANY VIBRATION TRAVELLING UP FROM THE FLOOR WILL CAUSE THE OBJECT AND FILM TO MOVE TOGETHER AS A UNIT. IN THE OTHER SET UP, VERTICAL MOTION WOULD MOVE THE FILM AND OBJECT SEPARATELY, BLURRING THE FRINGE PATTERNS. THIS IS AN EXCELLENT SET UP FOR MAKING HOLOGRAMS OF FLAT OBJECTS LIKE KEYS, COLLS, WATCHES, BELT BUCKLES AND RAZOR BLADES.

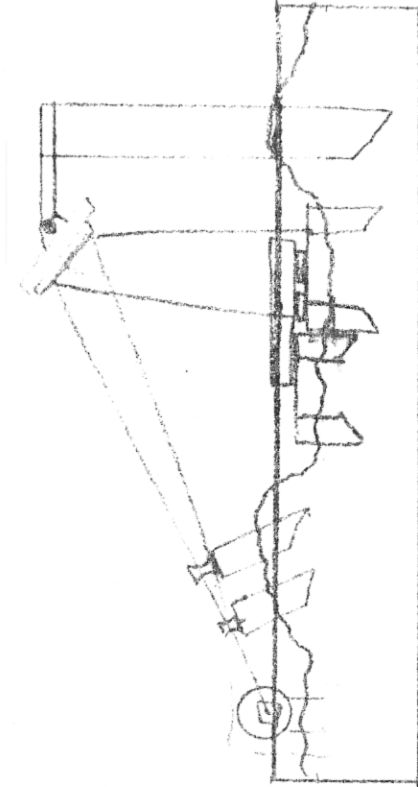
### SET UP STEPS

- I. PUT A SMALL MIRROR AT END OF LASER TO DIRECT BEAM BOTH DIAGONALLY ACROSS TABLE AND UP.
- II. DIRECT BEAM STRAIGHT DOWN WITH AN OVERHEAD MIRROR.
- III. TEMPORARILY PLACE OBJECT STAND WITH WHITE CARD ON IT UNDER THE BEAM.
- IV. SPREAD BEAM WITH LENSES SO THAT THE CLEAN AND BRIGHT PART JUST COVERS THE SIZE OF THE FILM YOU ARE USING TO MINIMIZE EXPOSURE.
- V. SLIDE OBJECT STAND OFF TO THE SIDE AND TAKE AN EXPOSURE READING WITH THE LIGHT METER POINTING STRAIGHT INTO THE BEAM AT THE PLANE WHERE THE FILM WILL BE PLACED. NO RATIO READING IS NECESSARY, AS THE OBJECT DETERMINES THAT.
- VI. REPLACE OBJECT STAND AND PLACE THE OBJECTS IN THE CENTER OF THE BEAM.
- VII. BLOCK OFF THE BEAM WITH THE CARD.
- VIII. AN EXTRA OBJECT STAND MIGHT BE NEEDED TO SUPPORT THE FILM HOLDER AS IT LAYS ON TOP OF THE OBJECTS.
- IX. EXPOSE AND PROCESS.
- X. RECONSTRUCT THIS HOLOGRAM UNDER WHITE LIGHT.

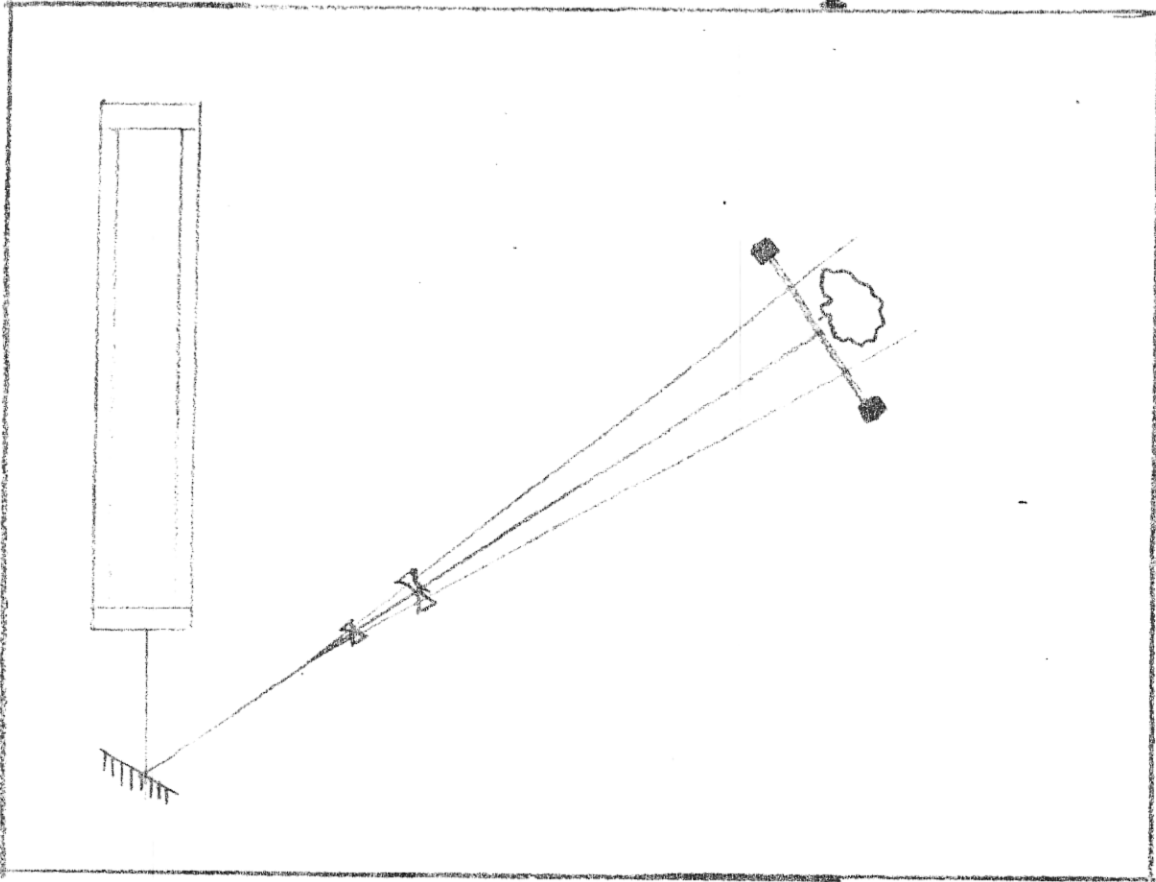
top view



side view



# SINGLE BEAM REFLECTION head-on set up



## notes

BECAUSE THE DEPTH OF THIS HOLOGRAM IS ONLY ABOUT TWO INCHES AND THE RATIO OF REFERENCE TO OBJECT BEAMS MUST BE 1 TO 1, YOU ARE LIMITED TO OBJECTS THAT ARE SHALLOW AND AS NEAR TO 100% REFLECTIVITY AS POSSIBLE. COINS, KEYS, NUTS, BOLTS, SPRINGS, HOOD ORNAMENTS AND LITTLE ROBOTS ARE USUALLY SUCCESSFUL. NO MOVEMENT CAN BE TOLERATED DURING EXPOSURE SO PILE PLENTY OF SAND AROUND ALL THE COMPONENTS AND HOT GLUE DOWN THE OBJECTS THAT MIGHT MOVE.

## set up steps

- I. SEND BEAM DIAGONALLY DOWN THE TABLE WITH A SMALL MIRROR.
- II. SET UP THE OBJECT STAND AND FILM HOLDER.
- III. SPREAD THE BEAM SO THAT THE CLEAN AND BRIGHT PART OF IT JUST COVERS THE SIZE OF FILM YOU ARE USING.
- IV. MEASURE THE AMOUNT OF LIGHT HITTING THE FILM PLANE BY POINTING THE LIGHT METER INTO THE BEAM WITHOUT THE WHITE DIFFUSER CAP IN PLACE. THIS IS THE EXPOSURE READING. THERE IS NO NEED TO TAKE RATIO READINGS SINCE THE RATIO IS CONTROLLED BY THE REFLECTIVITY OF THE OBJECT.
- V. POSITION OBJECT RIGHT NEXT TO THE FILM HOLDER.
- VI. EXPOSE AND PROCESS.
- VII. THIS HOLOGRAM CAN BE RECONSTRUCTED UNDER WHITE LIGHT.