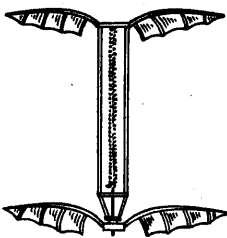
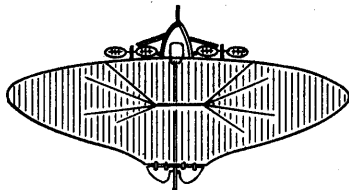


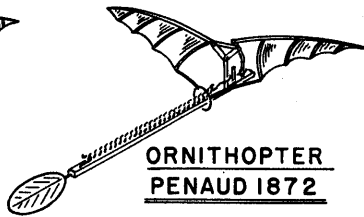
**HELICOPTER**



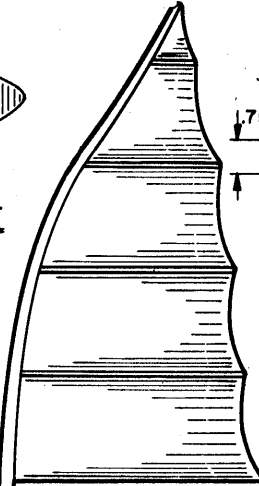
**PENAUD 1870**



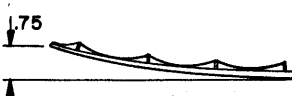
**1876 PENAUD & GAUCHOT**



**ORNITHOPTER  
PENAUD 1872**



**WING DIHEDRAL**

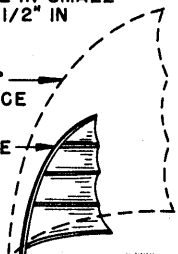


**NOTE:**

1/4" DIHEDRAL IN SMALL STABILIZER - 1/2" IN LARGER UNIT.

0 TO -2° INCIDENCE

-8° INCIDENCE



SMALL RUBBER BANDS

5/32" X 3/16"

WRAP WITH SILK THREAD

**WING MOUNT**

.012 DURAL OR TIN

**WING CURVE**

2 TO 4° INCIDENCE

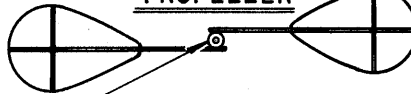
PIANO WIRE

GLUE & THREAD

SPAR

**WING MOUNT  
DETAIL**

**PROPELLER**



3/32" X 1/4" DOWEL

5/32" X 3/8" BLOCK - GLUE & WRAP WITH SILK THREAD.

**PENAUD 1871 "PLANOPHORE"**

SKETCHES BY C.C. MAGRATH FROM ORIGINAL MATERIAL AT SMITHSONIAN INSTITUTION.

**NOTE**

PENAUD MADE MANY TYPES OF PROPELLERS - EVEN SOME OF BENT WOOD, USING VERY THIN BASS OR PINE.

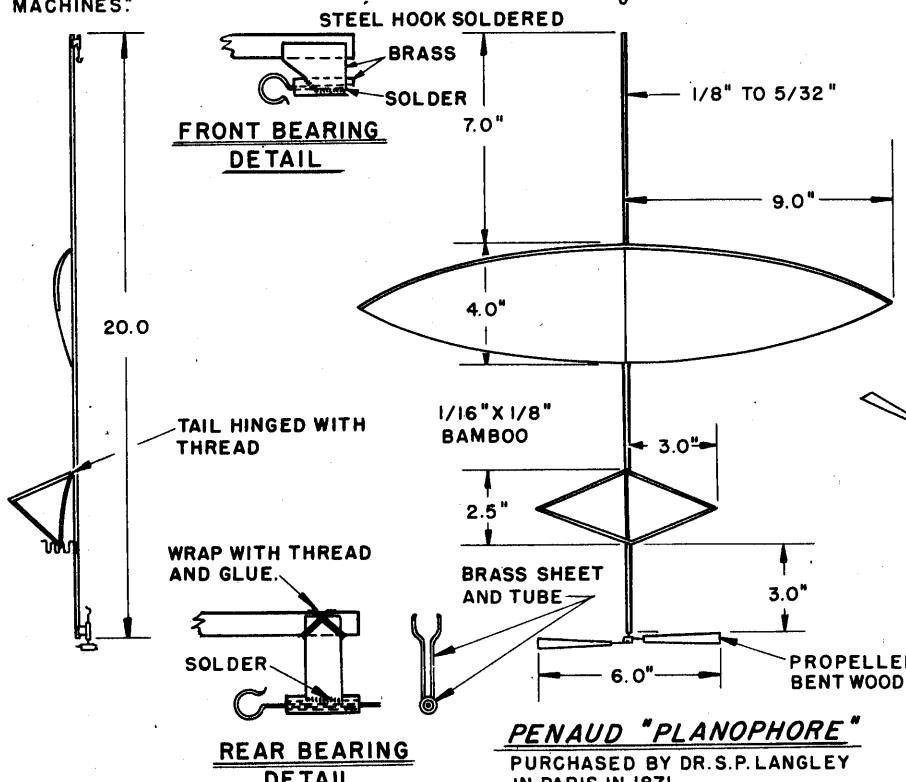
PLATE ONE

These sketches of details worked out by the amazing Penaud and proved practical in his experimental flying models bear fascinating similarity to present day ideas in model aviation.

DIMENSIONS ARE APPROXIMATE CHECK WITH CHANUTE'S "PROGRESS IN FLYING MACHINES"

DIHEDRAL SAME AS ON PLATE ONE

FROM SKETCHES MADE IN THE AIRCRAFT BUILDING OF THE SMITHSONIAN INSTITUTION BY CHRISTY MAGRATH.



**NOTE:**

NO RIBS OR TRAILING EDGE ON WING.

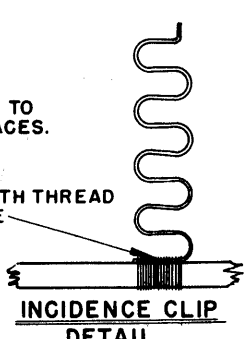
**NOTE:**

ALL DETAILS FULL SIZE.

**NOTE:**

RICE PAPER USED TO COVER ALL SURFACES.

WRAP WITH THREAD AND GLUE



**PENAUD "PLANOPHORE"**  
PURCHASED BY DR. S.P. LANGLEY IN PARIS IN 1871.

PLATE TWO

SCHROEDER