

in the 20th century, the brass parts were plated with either nickel or chrome.

It is likely that these instruments were originally in a vertical leather or fishskin covered etui (a small case), similar the case in the set shown in Photo 3. The original set would have included a pencil leg insert for the large compass to match the small ink compass, and perhaps also a dotting pen insert, and a pencil holder to stop thin pencils dropping out of sight in the case.



Illus 3 – A set of drawing instruments from about 1800 showing a vertical fishskin case

The Instrument Box

The box is almost certainly later than the instruments. It is a simple well made box with a hinged lid, probably made of mahogany. The body of the box and the lid are plain rectangular boxes with corners which are mitred and rounded. The tray is the same except that the corners are not rounded. All the joints are sound – no looseness, no opening, no movement. There is no evidence of dovetailing. The type of joint used was not evident until Kees Klep noticed some very thin angled lines, slightly darker than wood of the box, not more than one millimetre wide, across all the joints, two in each joint of the box itself and one in each joint of the lid and the tray. These wooden wafers are the only sign of the type of joint used, except that since the box is shallow the joints get additional support from the tops and bottoms. The box probably dates from the late 19th century.

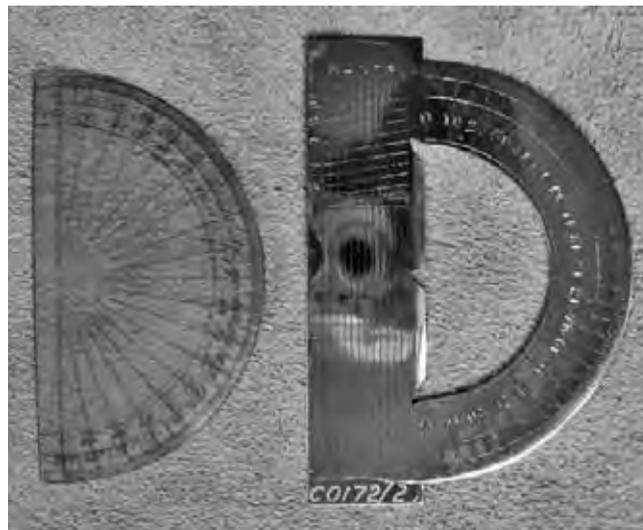
The number of compartments also indicates a date later than 1800. By the mid 1800s it was usual to include an extension bar for the compass plus two pens and other instruments.

The hinges are also interesting – each side of the hinge has a shoulder which holds lid in a near vertical position when it is open.

Protractors

The accessories include two protractors. One is metal, with the same high gloss finish as the instruments above, so it is likely that it is part of the same set. We presume that it too is made of brass, and is now plated. The other protractor appears modern at first glance, just clear plastic, but it is celluloid and it too has hand engraved lettering. Dating these items is difficult, as the lines engraved on each protractor appear to have been done by machine, but the numbering has been done by hand. Stamped numbering was introduced about 1800, but machine dividing for scales wasn't introduced until about 1870. Also, celluloid came into use about 1880. It seems likely that the metal protractor was made in the first half of the 18th century, and the celluloid protractor was made in the second half.

The lower part of the metal protractor provides a scale three inches long, accurate to one hundredth of an inch, to allow for the accurate setting of dividers and compasses.



Illus 4 – Protractors with machine-engraved lines and hand-engraved numbers