

# A NEW SERPENT

This new model has been introduced in response to the current demand for authentic styles of musical instruments and is based on a surviving French serpent of about 1750.

It is constructed in two halves by moulding to close tolerances both inside and out. The synthetic material used for the mouldings closely resembles hardwood in density and working properties but is not subject to splitting and warping and is unaffected by moisture. It is not threatened by the dryness of centrally heated interiors or by wide variations in heat and humidity. It is also very shock resistant. The exterior of each instrument is given a textured coating which has a visual resemblance to the black leather covering of original serpents.

The crook is made from seamless brass tube and is provided with the traditional thread binding to ensure a leak-tight fit with the body of the instrument. The serpent is pitched in A=440 with the standard crook and descends to C'. The mouthpiece is turned from an ivory coloured plastic.

The serpent is sounded by the lip-reed technique of brass instruments, but many of the notes are found with the aid of woodwind style finger holes. Consequently, the serpent is played with a hybrid technique suited to such a hybrid instrument.

From the bottom C' to the f of the second

octave, the finger holes are uncovered progressively to produce a rising scale, with much help from lip adjustments. Thereafter, the higher notes are obtained by sounding the natural harmonics of the tube, either with all finger holes closed, or with a few holes vented at strategic points, again with help from the lips.

The fingering chart reproduced here shows how this can be achieved, but many variations are possible depending on the skill and choice of the player. A few notes below the range shown are available if the lips are relaxed to a sufficient degree.

## Fingering chart for keyless serpent in C

The chart displays four systems of musical notation and corresponding fingering diagrams for the left hand (L.H.) and right hand (R.H.). Each system shows a staff with notes and a grid of fingerings (black dots for closed holes, white circles for open holes) for the 1st, 2nd, and 3rd fingers of both hands. The first three systems are in bass clef, and the fourth is in treble clef.

**System 1 (Bass Clef):** Notes: C2, C3, D3, E3, F3, G3, A3, B3, C4, D4. Fingering: L.H. (1, 2, 3); R.H. (1, 2, 3).

**System 2 (Bass Clef):** Notes: E4, F4, G4, A4, B4, C5, D5, E5, F5, G5. Fingering: L.H. (1, 2, 3); R.H. (1, 2, 3).

**System 3 (Bass Clef):** Notes: A5, B5, C6, D6, E6, F6, G6, A6, B6, C7. Fingering: L.H. (1, 2, 3); R.H. (1, 2, 3).

**System 4 (Treble Clef):** Notes: D7, E7, F7, G7, A7, B7, C8. Fingering: L.H. (1, 2, 3); R.H. (1, 2, 3).

A brief history.....

The keyless serpent appears to have been the result of efforts made at the end of the 16th century aimed at providing the long-established cornett family with a suitable bass instrument. This objective was never fully realized as for most of its life, the keyless serpent was used as an isolated instrument with choristers in church, and by the time it moved out into the world and had some keys added, the higher pitched members of the cornett family had long become obsolete. The keyed serpent found itself in the company of military bandsmen or in small church bands, with violins, cellos and woodwind instruments. France found most work for the keyless serpent where it supported the male voices in Gregorian chant and generally strengthened the bass line in all manner of church music. The standard of playing was variable; in his 'Musical Tours in Europe', 1770, Charles Burney describes the serpent as.....'in general overblown, and too powerful for the voices it accompanies; otherwise it mixes with them better than the organ, as it can augment or diminish a sound with more delicacy,....' Where good players were available the serpent received more attention and was given parts in more varied works. The limitations of the serpent were inescapable; its later developments, the bass-horn, Russian bassoon and ophicleide were all eventually swept aside together with their parent by valved brass instruments, which were easier to play, and had better intonation and evenness of tone throughout their registers. As a somewhat eccentric survival from a bygone age, the keyless serpent remains a highly entertaining and very decorative animal to have in the house and can be a remarkably sensitive musical instrument in capable hands.

