WIND INSTRUMENTS OF WOOD WITH MOUTHPIECE

THE SERPENT

This is a wooden instrument covered with leather, with a mouthpiece. It has the same range as the bass ophicleide, but less agility, purity and sonority. Among its tones there are three which are more powerful than the others: ; the player should try to smooth down this disturbing unevenness as much as possible. The serpent is in B♭ and must therefore be written a tone higher than the actual pitch, like the ophicleide in B♭.

![Serpent and Actual Pitch Diagram]

The truly barbaric tone of this instrument would be much better suited for the bloody cult of the Druids than for that of the Catholic church, where it is still in use—as a monstrous symbol for the lack of understanding and the coarseness of taste and feeling which have governed the application of music in our churches since times inmemorial. Only one case is to be excepted: masses for the dead, where the serpent serves to double the dreadful choir of the Dies Irae. Here its cold and awful blaring is doubtless appropriate; it even seems to assume a character of mournful poetry when accompanying this text, imbued with all the horrors of death and the revenge of an irate God. The instrument might also be used in secular compositions based on similar ideas; but its use must be limited to this purpose only. Moreover, its tone blends poorly with the other timbres of the orchestra and of voices. As the bass of a great mass of wind instruments it cannot match the bass tuba or even the ophicleide.

THE RUSSIAN BASSOON

This is a low instrument related to the serpent. Its timbre is not very characteristic, and it lacks steadiness and hence purity of intonation. In my opinion it might be dropped from the family of wind instruments without the least injury to art. Its general range is:

![Russian Bassoon Diagram]

Some players can reach the low C and go up to the high D; but these are exceptions which cannot be counted on in actual practice. The best tones of the Russian bassoon are D and E♭. Only extremely inferior effects can be expected from trills on this instrument. Russian bassoons are found in military bands. It is to be hoped that they will disappear forever as soon as the bass tuba becomes generally adopted.

VOICES

Voices are naturally divided into two great categories: the male (or low) and the female (or high) voices; the latter comprise not only women's voices but also those of children of both sexes and the voices of artificial sopranos and altos (castrati). Each of these two categories is subdivided into two classes, which, according to the generally accepted theory, have the same range but different pitch. The assumption customary in all Italian and German singing schools is that the low male voice—the bass—reaches from F under the stave of the F-clef to D and E♭ above the stave; and that the high male voice—the tenor—is a fifth above the bass and goes from C under the stave of the tenor-clef to A and B♭ above it. Women's and children's voices range in the same order, exactly an octave above the two men's voices: contralto (corresponding to the bass) and soprano (corresponding to the tenor). Hence the contralto can go (like the bass) from the low F to the high E♭ (almost two octaves), and the soprano (like the tenor) from low C to high B♭.

![Soprano, Tenor, Contralto, Bass Diagrams]