## INSTRUMENTS IN THE ORCHESTRA:

(9) The Trumpet

struments of the National Orchestra, written to help interested listeners towards a more informed apprecia tion of orchestral music and a better understanding of the resources at the command of the conductor.



brass or silver tube, doubled round upon itself, and having a cylindrical bore for about threequarters of its length. It has a cupshaped mouthpiece, and the ately, all together, or in combinations opposite end opens into a bell of medium size. It has three valves which, when pressed down by the player, serve

HE trumpet consists of a to increase the length of tubing through which the air from the player's mouth has to pass by opening up small extra sections of tube in the path of the column of air, thus producing a different note. The valves may be used separof two, each change bringing about a different effect. The movements of the player's lips and tongue also help to de-

termine the note to be produced, in addition to which a "mute" can be used. This is a pearshaped stopper which the player inserts into the bell of the instrument, softening and subduing the tone. Many other kinds of mutes for novel effects have been devised from time to time, but these are seldom used by the trumpet players in a symphony orchestra. The trumpet is pitched in B flat, but this can be modified to A if required.

The history of the trumpet is a long one. In its simplest form, that is a straight tube without finger-holes, it was used by the ancient Greeks and the Romans, and some readers may have heard the broadcast a few years ago in which trumpets recovered from the tomb of Tutan-khamen were blown. With the birth and growth of the orchestra the trumpet came into

wide use, but lost favour about the time of Mozart, possibly due to the latter's objection to the manner in which it was used in certain compositions by Handel and Bach, and which he transcribed, substituting woodwind instruments. During the early 19th Century, after many devices to overcome the limitations under which the trumpet still laboured had been tried with little success, the valve trumpet was invented. It was first used in 1835, and it was Wagner a few years later who restored it to popularity by his extensive use of it in his compositions. Since his day, most composers have featured two or three trumpets in their orchestral works, and it is sometimes to be found in smaller combinations of instruments,

The National Orchestra has three

trumpets.

Spencer Digby photograph J. SPRINGFIELD Principal Trumpet of the National Orchestra

(continued from previous page) window's design painted on them. Human figures, the landscape and objects in the scene, as well as such details as folds in drapery, flowers and animals, are portrayed in paint on the inside surfaces. In undertaking this exacting task, the craftsman places the glass pieces over the cartoon and paints with a fine brush and special pigments. One of the most skilful jobs is the making of the flesh parts, i.e., heads, hands and feet. Except in an extremely big window the head is normally on a single piece of glass. It is propped up and a light is shone through to help the artist make it lifelike. It is traditional for certain colours to be used for religious figures. Christ, for example, is usually garbed in ruby robes and the Virgin Mary in blue. It is thus possible to recognise major figures even in less conventional designs, some of which show Christ without a beard.





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