

MUSICAL TRUMPET.

THE Musical Trumpet is a wind instrument which sounds by pressing the closed lips to the small end, and forcing the wind through a very narrow aperture between the lips. This is one of the most ancient of musical instruments, and has appeared in all nations in a vast variety of forms. The conch of the savage, the horn of the cow-herd and of the postman, the bugle horn, the lituus and tuba of the Romans, the military trumpet, and the trombone, the *cor de chasse* or French horn—are all instruments winded in the same manner, producing their variety of tones by varying the manner and force of blowing. The serpent is another instrument of the same kind, but producing part of its notes by means of holes in the sides.

Although the trumpet is the simplest of all musical instruments, being nothing but a long tube, narrow at one end and wide at the other, it is the most difficult to be explained. To understand how sonorous and regulated undulations can be excited in a tube without any previous vibration of reeds to form the waves at the entry, or of holes to vary the notes, requires a very nice attention to the mechanism of aerial undulations, and we are by no means certain that we have as yet hit on the true explanation. We are certain, however, that these aerial undulations do not differ from those produced by the vibration of strings; for they make strings resound in the same manner as vibrating cords do. Galileo, however, did not know this argument