conveniently reach the touches of all the keys, without the position of the hand being altered.

The most important point to be observed in joining the parts of the flute is the correct adjustment of the head-joint. This must be so placed that the outer edge of the mouth-hole shall be rather within than without the line of the centres of the finger-holes. The reasons for this turning inwards, which has been recommended by almost every writer of authority on the subject, will appear at length in the next chapter.

When put together correctly, the joints should be marked with the point of a pen-knife. A neat and convenient method of doing this is to make two small dots, one on each side of the junction, thus:

By means of these marks, uniformly true adjustment may be readily effected, and much time and trouble saved.

## CHAPTER XVII.

ON THE POSITION OF THE PLAYER; THE SUPPORTING OF THE FLUTE; THE ACTION OF THE FINGERS, ETC.

§710. THE POSITION OF THE BODY AND THE HEAD.—712. THE SUPPORTING OF THE FLUTE.—715. AUTHORITIES FOR TURNING THE MOUTH-HOLE INWARDS.—716. AUTHORITIES FOR PRESSING THE RIGHT HAND THUMB AGAINST THE SIDE OF THE FLUTE.—717. THE POSITION OF THE FLUTE.—718. THE POSITION OF THE LEFT ARM, HAND AND FINGERS.—719. THE POSITION OF THE RIGHT ARM, HAND AND FINGERS.—720. THE ACTION OF THE FINGERS.—721. GENERAL REMARKS ON POSITION.

710. The Position of the Body and the Head. When playing a solo or an obbligato in public, the flute-player should always stand before his audience for the sake of appearance; at other times a sitting posture is generally to be preferred. As far as convenience in playing is concerned, one position is just as good as the other, but, as sitting is undoubtedly less fatiguing, it would be advisable either to adopt that position during long continued practice, or to stand and sit alternately.

Whether standing or sitting, the player must keep the body erect and still; the shoulders as nearly as possible on a level; the chest raised and slightly thrown forward, and the shoulder blades rather nearer together than ordinarily, so that a full inspiration may be conveniently taken. When standing, the weight of the body should rest chiefly on the right foot; the left leg should be somewhat in advance of the right; the left knee slightly bent, and the heel three or four inches from the right foot. Both feet should, of course, be turned outwards.

It is important, particularly in a large room, to turn the footjoint of the flute towards the audience, otherwise a great deal of the tone will be lost. See §246. 420

In sitting, the body must be maintained in precisely the same position as in standing, the knees being kept in front of the body, and the feet resting flat on the floor. The legs must never be crossed. The front of the seat will be conveniently placed at an angle of forty-five degrees to the ledge of the music-stand. Leaning against the back of a chair materially diminishes the capacity of the chest; the habit should therefore be carefully avoided, but, should it have been contracted, it may be corrected by using a stool instead of a chair. The customary support being lost, an inclination to stoop may be felt; this must be energetically resisted.

711. Excepting for a slight leaning to the right, which is necessary for reasons hereafter explained, the head must be kept in an upright position, with the chin vertical to the forehead, and the face turned towards the left shoulder sufficiently to form an angle of about forty-five degrees to the chest. On no account must the neck be craned forward; it is better for the head to be held as far back as it conveniently can be, consistently with its quasi-upright position. The music must be elevated on a desk, and placed opposite to the face, unless two persons have to play from the same part, in which case mutual concession is necessary.

The player should stand or sit as still as possible; there must be no swaying of the head or the body in cadence with the music, nor must there be any of the ungainly and ridiculous rollings and contortions too often substituted for musical expression. A true musician will endeavour to produce an effect by his artistic rendering of the music of which he is the exponent; not by acting or attitudinising; he will look steadily and fearlessly, straight in front of him, either at his music or at his audience; his face will wear a calm, dignified and pleasant expression, free from all trace either of anxiety or desperate resolve; above all, there will be no frowning, raising of the eyebrows, or casting upwards of the eyes.

712. The Supporting of the Flute. In order that the flute may be held at all times steadily and firmly, one of the

essential conditions for good playing, its support must not be allowed to depend on any parts of the hands which are required to act, either directly or indirectly, on the finger-holes. It must therefore be pressed against the lower part of the under lip by means of the base of the left hand first finger and the tip of the right hand thumb. The pressure of the finger and the thumb must be nearly horizontal and exactly opposed. The left hand first finger, being placed against the outer side of the flute (at a short distance above the c'' hole, or the touch of its key), will press the upper part of the flute inwards. The tip of the right hand thumb, being placed against the inner side of the flute (almost between the first and second fingers of the right hand), will press the lower part of the flute outwards. The flute will thus become a lever of the first order, the left hand first finger being the fulcrum, and the right hand thumb the power. It will be evident that if the right hand thumb were placed under the flute, exercising pressure in an upward direction, depression of the head-joint could only be prevented by the downward pressure of one or more of the right hand fingers, or by the upward pressure of the left hand thumb. Either of these correctives would necessarily violate the primary rule for supporting the flute. The thumb will have no tendency to slip if its pressure be directed exactly towards the centre of the bore.

The thumb should always be placed to the right of the first finger, otherwise the action of the fourth finger on the open keys of the foot-joint might cause the first finger to act as a fulcrum, and the thumb would thus acquire a tendency to move the head-joint on the lip at the moment when the steadiness of the flute would be of the greatest importance.

713. It will be found convenient to allow the left hand thumb, and perhaps some of the fingers of both hands, to aid in holding the flute previously to its contact with the lip. There can be no possible objection to this temporary use of the thumb and fingers, but during performance the flute must depend for its support entirely on the three points before

mentioned. Players on the eight-keyed, or any other flute with the old fingering, may rest the left hand thumb against the flute, being careful that no support shall be thus given to the instrument.

714. It would be impossible to hold the flute according to the above directions, without adjusting the head-joint in the manner recommended in the last chapter. As I have frequently been accused of introducing unwarrantable innovations by recommending the turning inwards of the mouth-hole (or, more correctly, the turning outwards of the other parts of the flute) and the placing of the point of the thumb against the inner side of the flute, I cite some authorities for my opinions and my teaching whose weight few will venture to call in question. It may be noticed that the name of Boehm does not appear on the list: he was one of the very few who placed the mouth-hole in a straight line with the finger-holes, and, because he did so, he was unable to hold his flute without the aid of his "crutch."

715. Authorities for turning the Mouth-hole inwards. Quantz. (1752) "In order to hold the flute without affectation, it will be necessary to join its parts together in such a manner that the holes of the second and third joints shall be ranged in a straight line. . . . The head-joint must be so adjusted that the mouth-hole shall be turned inwards, towards the mouth and out of the line of the finger-holes, to an extent equal to the diameter of the hole."

Devienne. (1795) "If the mouth-hole of the flute be placed in a straight line with the finger-holes, the player will be compelled either to raise his [left] elbow too high, or to lower his head.

. . . The mouth-hole should therefore be turned inwards."
Devienne's diagrams show the mouth-hole so turned, but only to half the extent recommended by Quantz.

Berbiguier (1820 circa) makes no remarks on the adjustment of the head-joint, but his diagrams show the mouth-hole turned considerably inwards.

Drouet. (1827) "The mouth-hole should be turned more inwards than the finger-holes." In the English edition of

Drouet's book (1830) the head-joint is directed to be "turned inwards so far that the outward edge of the embouchure is very nearly in a line with the centre of the first hole of the left hand."

Dressler. (1828) "The Embouchure . . . [should be] inclined inwards a little, so that the line passing through the centres of the finger-holes may touch the outward edge of the embouchure."

Lindsay. (1828) "The first masters of the day recommend the mouth-hole to be turned inwards to nearly the extent of its own diameter."

Tulou. (1835 circa) "The mouth-hole should be turned so that its outer edge may be in a line with the centres of the finger-holes" (que le bord extérieur soit sur la ligne qui partage les trous).

Nichelson (1836) gives no directions in words for the adjustment of the head-joint, but his diagrams show that he adopted the method of Quantz.

Côche (1838) gives directions which, though differently expressed from those of Drouet and Tulou, have virtually the same meaning.

716. Authorities for pressing the Tip of the Right Hand Thumb against the Side of the Flute. Before the introduction of the "extra keys" the place and the action of the right hand thumb were of no great importance, because the equilibrium of the flute could be maintained by the otherwise unemployed thumb of the left hand, even when the right hand thumb was placed underneath the instrument. The first author who recommended the placing of the tip of the thumb against the side of the flute was Tromlitz (1791). Since his time the only authors of any importance who, as far as I am aware, advocated any other position for the right hand thumb were Tulou and his pupil Walckiers. Tulou adopted an extraordinary position for the left hand thumb, placing it on the middle of the closed by key, and never removing it except for the shake. When he required to use the key for other purposes he slipped, or rolled, the thumb on to the touch of the key. By this inconvenient

means he was enabled to hold the flute much in the same way as Quantz held it when there was no thumb-key, but while little can be said in defence of Tulou's custom, it should be remembered that he constantly used the fork-fingerings in rapid passages, and therefore his left hand thumb would probably have been chiefly used in supporting the flute, that is, in counteracting the upward pressure of the right hand thumb.

The rational system of holding the flute was thus explained by Drouet in his Méthode: "The flute should be supported by the . . . . first finger of the left hand; by the thumb of the right hand, and by the lower part of the under lip. It is necessary to practise holding the flute perfectly steadily, and supported only by the three points indicated above, so that when it is placed to the mouth every finger, with the exception of the right hand thumb, may be free to move without endangering the steadiness of the instrument. . . The tip of the thumb should be pressed against the inner side of the third joint of the flute, between the fourth and fifth [of the six open finger-] holes."

No one ever wrote on the subject of flute-playing whose opinions are entitled to greater consideration than those of Drouet, and his directions, though not original, have been more or less closely followed, until lately, by flute-players of all nations, but I regret to say that a most reprehensible movement has recently sprung up, amongst a certain few English players, against the true system of holding the flute. I consider it my duty to protest emphatically against this innovation.

717. The Position of the Flute. The instrument should be held in such a position that it may form a right-angle with an imaginary line from the centre of the forehead to the centre of the chin. The head of the player being inclined to the right, the foot-joint of the flute will therefore be slightly lower than the head-joint: this depression may be carried to the extent of two or three inches. A perfectly horizontal position of the flute, which would demand an upright position of the head, has an ungraceful appearance, and is fatiguing to the right arm.

Another line may be supposed to be drawn horizontally from the centre of the lips to the back of the head, and with this line the flute should also form a right-angle, if possible, but this is not a point of vital importance, and it often happens that the conformation of the mouth will compel the player to depart from the rule. Further allusion to this matter will be found in the next chapter.

718. The Position of the Left Arm, Hand and Fingers. The left elbow of a full-grown person will be advantageously placed at a distance of about five or six inches from the body, the wrist being depressed sufficiently to bring the centre of the hollow, which lies between the thumb and the first finger, immediately beneath the flute. The back of the hand should be almost perpendicular.

The first finger must be bent almost as much as possible, and the point of the finger being placed on the hole or key allotted to it, the upper side of the second joint of the finger should be on a plane parallel to the flute.

On a modern flute the second, third and fourth fingers should be bent almost equally, but not so much as the first finger. The third finger will require to be much more nearly straight on the old flute, in order that the  $a \parallel$  hole may be conveniently reached, but of course the curvature will depend in a great measure on the length of the fingers.

The base of the fourth finger should be kept at a distance of about an inch and a half from the flute, and this part of the finger should be on a level with the under side of the flute. The fourth finger should never be placed underneath the flute.

The thumb should be almost perpendicular, and should be kept as straight as the arrangement of the keys will permit, the thumb-key or keys being pressed by the base of the upper joint. The position of the hand, as described above, will render it necessary for the thumb-nail to be at an angle of about forty-five degrees to the flute.

719. The Position of the Right Arm, Hand and Fingers. The right elbow should be almost on a level with the left elbow,

the wrist being raised sufficiently to bring the fingers well over the holes.

The second finger should be as nearly at right-angles to the flute as circumstances will permit, and should be bent rather less than the second finger of the left hand. The tips of the first, second and third fingers being ranged in a straight line on the holes or keys respectively allotted to them, the first and third fingers will be naturally less bent than the second, on account of their comparative shortness.

The point of the fourth finger should act on the touch of the d' key. It will generally be necessary to keep this finger straight when closing the key of the c' hole. The curvature of the first, second and third fingers should remain always the same.

The thumb must be kept very nearly in a horizontal position, the tip (or the part as near the tip as the shape of the thumb will allow) being placed against that part of the side of the flute which lies under the space between the first and second fingers, and, the four fingers being in the positions indicated above, the thumb-nail of a well-formed hand will be nearly at right-angles to the palm of the hand and to the flute. A backward curvature of the thumb is an advantage which there should be no attempt to nullify by bending the knuckle.

720. The Action of the Fingers. The first finger of the left hand should move at the second knuckle only. The other seven fingers and the left hand thumb should move only at the lowest knuckles, excepting when the right hand little finger requires to be straightened in order to finger c'\(\mathbb{Z}\) conveniently. With this exception, the curvature of the fingers will remain always unchanged, but there must be no stiffness, and the one knucklejoint of each finger which it is necessary to move should be allowed the freest play possible. The holes should be closed gently but suddenly, rather by light tapping than by squeezing. The uncovering of the holes should be effected at least as suddenly as the covering. Neglect of these precautions would cause a blurring in passing from one note to another when

attempting to play *legato*. The ends of the fingers need never rise more than a quarter of an inch from a key or more than half an inch from a hole not furnished with a key.

The steadiness of the flute must never be in the slightest degree endangered by the action of the fingers. This is a most important matter at all times, and the movement of the flute by the employment of unnecessary force in fingering is a frequent cause of indistinctness of tone during the performance of rapid passages, but in fingering c' or  $c' \sharp$ , often the most difficult notes to produce, a perfectly steady position of the flute may make all the difference between certainty of production and utter failure.

721. General Remarks on Position. It should not be found difficult to observe the foregoing precepts, and at the same time to avoid any approach to rigidity, affectation, or inelegance, either of position or of manner, but in order that a correct and graceful posture may be always maintained, frequent and careful self-examination will be absolutely necessary. I was told by an old friend and pupil of A. B. Fuerstenau that it was the special pride of that great artist never to omit his daily practice before a looking-glass, and the regular observance of this custom cannot be too highly recommended. The only really good flute-player, that I have ever seen, who did not maintain an elegant position while playing, was Giulio Briccialdi.

722. The following remarks on the position of the player, by the author of the first complete instruction-book written for the flute, namely "Hotteterre le Romain" (1699), may be found interesting. I translate the quaint old French as closely as I can:

"As in order to arrive at perfection in all accomplishments in which one is desirous to succeed, it is necessary to unite, as far as possible, gracefulness with skill, I shall begin this treatise by an explanation of the position which should be adopted in playing the transverse flute.

"Whether the player stand or sit, the body should be upright; the head rather high than low, and slightly turned towards the left shoulder; the hands raised, but without the

elbows or the shoulders being elevated; the left wrist bent inwards, and the left arm near the body. If standing, the player should be well balanced on the legs, with the left foot advanced, and the weight of the body resting chiefly on the right hip. This position must be maintained without the least constraint. Above all, it is necessary to avoid making any movement of the body or the head, as many persons are apt to do in beating time. These directions, carefully followed, will promote a very graceful attitude, which will be not less pleasing to the eye than the tone of the instrument will be agreeably soothing to the ear.

"In order that all these rules may be observed, it will be well to place one's self before a mirror, a precaution that will be of great utility."

## CHAPTER XVIII.

ON SOUND-PRODUCTION, SIMPLE ARTICULATION, INTONATION, QUALITY OF TONE, ETC.

\$723. THE PLACING OF THE FLUTE TO THE LIP.—726. THE MANAGEMENT OF THE LIPS AND THE LOWER JAW.—735. THE PRODUCTION OF SOUND.—737. THE USE AND THE ABUSE OF THE TONGUE IN ARTICULATION.—745. THE PRODUCTION OF THE NOTES FROM c' TO c''', INCLUSIVE.—751. THE PRODUCTION OF THE NOTES d'' AND d'''.—752. THE PRODUCTION OF THE NOTES FROM e'' TO c''', INCLUSIVE.—758. THE PRODUCTION OF THE NOTES c''' AND d'''.—759. THE PRODUCTION OF THE NOTES ABOVE d'''.—762. INTONATION.—765. THE USE OF THE TUNING SLIDE.—767. ALTERED SEMITONES.—769. THE TONE OF THE FLUTE.—775. THE MANAGEMENT OF FLUTES OF VARIOUS MATERIALS.—778. INFLECTION OF TONE.—779. LEGATO PLAYING.—780. THE PLAYING OF OCTAVES.

723. The Placing of the Flute to the Lip. The head of the player being first placed as directed in the last chapter, let the flute be adjusted to the lower lip, on no account lowering the head towards the flute. It will be found convenient to place the flute, at its first contact with the lip, rather below its true position, in order that its final adjustment may be effected in an upward direction. After contact it may be raised sufficiently to cause the inner edge of the mouth-hole to rest against the edge of the red-part of the lip, supposing the mouth-hole to be of the proper size, and the lip to be of average thickness. Under certain circumstances this rule would, of course, require modification, but in any case a sufficient portion of the lip should be left free to protrude so that it may cover from one to three-quarters of the area of the mouth-hole, as may be required. Placing the flute too high would be likely to hinder this necessary protrusion, and to cause a dragging downwards of the lower lip, which might create a