

## LIGATION OF ARTERIES.

The accompanying plate indicates the positions in which the operation of ligating an artery in its continuity is most commonly performed. There is no point at which ligatures are applied which is not represented, with the exception of a few which are very rarely chosen. With the explanations which follow, this diagram will serve as a guide to the practitioner who may be called upon in an emergency to perform an operation in regard to which he has grown somewhat rusty from want of practice.

**1. Ligation of the Temporal Artery.**—The temporal artery is the continuation of the external carotid from the level of the lobe of the ear to the level of the eyebrow, where it divides into its terminal branches. The point at which it is ligated is a little in front of the anterior curve of the concha. A vertical incision, about an inch in length, is made in front of the concha. The artery is easy to find, as it is very superficial at this part of its course. Its accompanying vein lies to the outer side, and the temporal branch of the auriculo-temporal nerve lies in front of it.

**2. Ligation of the Occipital Artery.**—The occipital artery comes off from the posterior part of the external carotid at about the level of the angle of the lower jaw. It curves backward under and to the inner side of the mastoid process, at the back of which it comes out through the attachment of the trapezius muscle, and winds in a tortuous course upward over the occipital bone. The point at which it is ligated is about an inch behind the ear. An incision an inch and a half long, parallel to the posterior edge of the mastoid process, will expose it. Its accompanying vein lies to the outer side of it. (There are but few occasions when it is necessary to ligate this artery, as its position makes it very easy to stop the flow of blood through it by pressure with a suitable compress and bandage.)

**3. Ligation of the Facial Artery.**—The facial artery comes off from the external carotid just below the level of the angle of the lower jaw, and passes forward below this bone to a point just in front of the insertion of the masseter muscle. Here it sends a branch forward—the submental—while the main trunk curves up over the lower jaw and passes in a tortuous course toward the angle of the mouth. The point at which it is ligated is that at which it ascends in front of the masseter muscle. An incision an inch in length will expose it. Its accompanying vein lies to the outer side.

**4. Ligation of the Lingual Artery.**—The lingual artery comes off from the external carotid at the level of the great cornu of the hyoid bone. It passes forward under the posterior belly of the digastric muscle and the styloglossus and hyoglossus muscles to the root of the tongue, and thence to its further distribution. It is in some respects the most difficult artery to ligate in the whole body. The point at which it is ligated is the second part of its course, under the hyoglossus muscle. An incision is made about half an inch above, and parallel to, the great horn of the hyoid bone, and extending from just in front of the anterior edge of the sterno-cleido-mastoid muscle to near the middle line of the neck, half an inch below the base of the jaw. The skin and subcutaneous fat having been divided, the capsule of the submaxillary gland will be met. This capsule must be divided, and the gland carefully drawn up over the jaw. In doing this, great care must be taken not to injure the facial artery and vein which pass through the gland. The posterior part of the capsule of the gland must next be divided. This will expose the shining aponeurosis which constitutes the pulley of the digastric muscle and attaches it to the great horn of the hyoid bone, near the insertion of the stylohyoid muscle. Behind these passes the hypoglossal nerve. This must be delicately detached from the sheath of the hyoglossus muscle, which lies below it, and pushed up out of the way. As the next step, fix the pulley of the digastric