blood beginning inſtantly to flow. Throwing the muscles of the part into constant action, by giving the patient a cane or any other firm ſubſtance to turn frequently round in his hand when the operation is done in the arm, will often an­ſwer in producing a conſtant flow of blood from a vein when every other means has failed : And, laſtly, when the pulſe in the inferior part of the member is felt very feeble, or eſpecially if it cannot be diſtinguiſhed at all, we may be thereby rendered certain that the ligature is too tight, and may in general have it in our power to produce an immediate flow of blood, by removing the compreſſion thus improperly made upon the arteries of the part.

VI. A quantity of blood proportioned to the nature of the disorder being thus diſcharged, the pressure upon the ſuperior part of the vein ſhould be immediately removed ; and this being done, if the spear-pointed lancet has been uſed, all farther loſs of blood will in general stop immediate­ly. The contrary of this, however, ſometimes occurs, and blood continues to flow freely even after the ligature is re­moved. When this is the caſe, the operator ought to com­preſs the vein both above and below the orifice, by means or the finger and thumb of one hand, ſo as to prevent any farther loss of blood. This being done, and the orifice be­ing cleared of every particle of blood, the ſides of it ſhould be laid as exactly together as poſſible ; and a piece of court or any other adheſive plaſter being ſo applied as to retain them, it will ſeldom happen that any kind of bandage is ne­ceſſary : but when the blood has iſſued with uncommon vio­lence during the operation, and has been difficult to com­mand after the removal of the ligature, in ſuch inſtances it will be prudent to apply a ſmall compreſs of linen over the plaſter, and to ſecure the whole with a linen roller properly applied round the member.

Sect. II. *Of Veneſection in different Parts of the Body.*

When veneſection is to be performed in the arm, the li­gature for stopping the circulation ought to be placed about an inch or an inch and a half above the joint of the elbow, and brought twice round : in order to prevent the ends of it from interfering with the lancet, the knot ſhould be made on the outſide of the arm. In general, one knot might an­ſwer ; but a slip-knot being made above the first, renders it more ſecure, and it is very easily done.

In forming the choice of a vein ſrom whence blood is to be taken, the general rules we have already laid down upon this point muſt be here particularly attended to. In gene­ral the artery lies ſo low in this place, that the median baſilic vein, under which it commonly runs, may be opened with perfect ſafety ; and as this vein in general appears more con­spicuous than any of the others, probably from the continued pulſation of the artery below obſtructing in ſome meaſure the paſſage of its contents, it is in this reſpect therefore more properly calculated for this operation than any of the others. Other circumſtances occur too which render the median baſilic preferable to the cephalic or median cephalic veins for the operation of blood-letting. The former, viz. the me­dian baſilic, is leſs deeply covered with cellular ſubſtance ; and by lying towards the inner part of the arm, it is more thinly covered with the tendinous expanſion of the biceps muſcle than either of the others. From theſe circumſtan­ces, the operation is always attended with leſs pain when done in this vein than in any of the others.

In very corpulent people, it ſometimes happens that all the larger veins lie ſo deep as not to be diſcovered by the eye ; but when they are lenſibly felt by the fingers, even although they cannot be ſeen, they may be always opened with freedom. In a few inſtances, however, they can neither be diſtinguiſhed by the eye nor by the finger ; in ſuch a situation, as they may in general be met with about the wriſt or on the back-part of the hand, the ligature ſhould be re­moved from the upper part of the arm ; and being applied about half way between the elbow and wriſt, the veins be­low will thereby be brought into view; and wherever a vein can be evidently obſerved, there can be no danger in having recourſe to the operation.

There is only one vein of the neck, viz. the poſterior external jugular, which can eaſily be brought ſo much into view as to be with propriety opened ; and even this lies deeply covered with parts, not only with the ſkin and cellu­lar ſubſtance, but with the fibres of the platiſma myoides muſcle ; ſo that a conſiderable degree of preſſure becomes neceſſary in order to raiſe it to any height. With a view to produce this, the operator’s thumb is commonly adviſed to be placed upon the vein, ſo as to compreſs ineffectually about an inch or an inch and a half below where the open­ing is to be made. This, however, ſeldom proves ſufficient for the purpoſe, as the blood, on being stopped in its pro­greſs through this branch, eaſily finds a paſſage to the other veins ; ſo that unleſs the principal vein on the other side of the neck is alſo compressed, the vein to be opened can never be fully diſtended. In cider to effect this, a firm compreſs of linen ſhould be applied on the largeſt vein on the oppo­ſite ſide of the neck ; and an ordinary garter, or any other proper ligature, being laid directly over it, ſhould be tied with a firm knot below the oppoſite arm-pit ; taking care to make ſuch a degree of preſſure, as to put an entire stop to the circulation in the vein, which in this way may be eaſily effected without producing any obſtruction to the patient’s breathing. But to prevent every inconvenience of this kind, ſee an inſtrument contrived for the purpoſe, Plate CCCCLXXXVII. fig. 9.

This being done, and the patient’s head properly ſup­ported, the operator, with the thumb of his left hand, is now to make a ſufficient preſſure upon the vein to be open­ed ; and with the lancet in his right hand is to penetrate at once into the vein ; and before withdrawing the inſtrument, an orifice ſhould be made large enough for the intended eva­cuation. It may be proper to obſerve, that a more extenſive opening ought always to be made here than is neceſſary in the arm, otherwiſe the quantity of blood is generally pro­cured with difficulty: and beſides, there is not the same neceſſity for caution on this point here that there is in the arm ; for it ſeldom or never happens that any difficulty oc­curs in this ſituation, in putting a stop to the blood after the preſſure is removed from the veins ; all that is common­ly neceſſary for this purpoſe being a slip of adheſive plaster without any bandage whatever.

In order to bring the vein more clearly into view, ſo as afterwards to be able to open it with more exactneſs, it has been recommended, that the ſkin, cellular ſubſtance, and muſcular fibres covering the vein, ſhould be previouſly divi­ded with a ſcalpel before attempting to puſh the lancet into it. There is not, however, any neceſſity for this precau­tion, as it rarely happens that any difficulty is experienced in procuring a free diſcharge of blood by opening the vein and teguments at once in the manner directed. And it is here, as in every inſtance where it is neceſſary to take blood by a lancet, if it is not done at once, the patient is much disappointed, and is ſure to attribute the failure entirely to a fault in the operator.

When blood is to be diſcharged from the veins of the ankle or feet, the ligature being applied a little above the ankle-joint, all the branches of the vena ſaphena, both in the inſide and outſide of the foot, come at once into view ; and as this vein lies everywhere very ſuperficial, being in general covered with skin only, wherever a pro­