at once to his home or the nearest Hospital; he will make a minute report to head quarters of all circumstances connected with the case; and he will make a weekly report of the state of his patients, through the commanding officer to head quarters.

99. The medical officer of the day will inspect the camp and vicinity, the guard tents, cooking kitchens, latrines, &c., and will report any dirty or unhealthy condition of the camp to the commanding officer of the camp.

SELECTION OF SITE FOR ENCAMPMENT.

100. The following are the principles which have mainly led to the established forms of military encampment, and, however troops may be encamped, these principles should govern the disposition of the camp.

1st.—The front of the camp should correspond in extent with the front occupied by the force when deployed in line.

2nd. The means of passing freely through the camp with a large front should be maintained.

3rd.—The tents, bivouacs, or huts should be disposed with a view to the greatest amount of order, cleanliness, ventilation, and salubrity.

4th.—The camp should be as compactly arranged as the above considerations permit.

101. Battalion tents should never be arranged in a double line; short single lines are best. The tents in line should be separated from each other by a space at the very least equal to a diameter and a half of a tent, and the farther the lines can be conveniently placed from each other the better. Where troops are at a distance from an enemy, and are to remain some time in camp, and ground is available, the camps may be formed at double intervals.

102. Whenever troops remain in camp more than three days, tents should be struck every two days. All arms, straw, and blankets be removed from the ground covered by the tent, and the ground should be swept clean with a broom, or branches of trees, and left exposed to the sun and wind. Blankets, clothes, &c., should be spread out to air, and the tent roughly pitched in the intervals of the camp with slack ropes, and the fly loose to allow it to be well blown about; tents should never be pitched in the intervals. Men invariably at night urinate round the tent and consequently pollute the ground.

103. Whenever troops remain more than one night in camp, the tent flys should be rolled up every morning; in rainy weather, the fly may be rolled up on the leeward side of the tent.

104. As a rule, the doors of the tents should face the head of the column, but this rule should never prevent their being turned away from the prevailing wind.

105. Trenches should be dug round tents and a drain should connect these trenches so that the water may not lodge in them, but may run freely off. The first wet day after the camp is formed, officers commanding companies should personally examine the ground on which their companies are encamped, and should see that proper drains are constructed; half an-hour's work on a wet day, when the natural run of water can be seen, will do more to keep the camp healthy than a day's labour in dry weather.

106. In encamping large bodies of troops it is very desirable that a sketch of the ground, no matter how rough, showing the place to be occupied by each corps, should be prepared beforehand; by this means the officer charged with forming the encampment can in a few minutes place the whole of the camp colour men, so that when the regiments arrive they may proceed at once to the position assigned to them. Cavalry and Artillery should never be placed on a flank, unless the latter may be necessary for defensive purposes, in which case the guns should be protected by a strong guard of Infantry. The reason for this is that, in case of attack, mounted corps take longer to turn out, and the horses, if frightened, are apt to produce much confusion.

107. The Commissariat Depôt should be placed in a central position, with easy access to all parts of the camp, and close to a good road by which supplies can brought up. The Engineers usually encamp to close Head Quarters of the Division.

WATER SUPPLY.

108. Few things are of more importance to the well being of troops when encamped, than a plentiful supply of pure water.

109. Water is usually obtained from streams, ponds, or existing wells. When troops are encamped for a considerable time, or when stationary depôts are formed on the line of communications, it may be necessary to sink the wells, make reservoirs, and lay pipes.

110. From whatever source the water supply is derived, it is absoulutely requisite that it should not be polluted. The officer entrusted with the duty of forming the encampment will therefore post sentries over it, taking them from the first troops that arrive on the ground; when the camp is completely formed, a regular guard will be posted over the water supply. If the supply is from a stream, great care should be taken that the watering place for the men should be distinct from that for the animals. The latter must be lower down the stream than the former, and it is advisable to send patrols up the stream to prevent men washing or bathing in it.

111. All washing in the neighbourhood of wells or watering places used for drinking, should be strictly forbidden, as the foul water percolates through the soil.

112. If the stream have a muddy bottom, great care should be taken not to stir up the mud by dipping vessels into it; small field pumps, which form an article of engineer equipment, should be fixed and the supply obtained in that way. If the stream be shallow, dams should be made on it; these are easily constructed with a few pickets and sods,—a small piece of tarpauling may be used with great advantage for the purpose of making them water tight. A barrel sunk in the bottom of the stream affords a convenient place into which to dip the sucker of the pump, or collect water.

113. Filters can be easily made by placing two barrels one within another, and ramming the place between with clean straw, coarse sand and charcoal if it can be procured, or branches of trees with the bark taken off. The water is allowed to flow into the outer barrel and rises through holes pierced in the bottom of the inner barrel. In a standing camp, if the water is not good, charcoal should be made, and the water regularly filtered: an average of 1 gallon per head is enough for troops when encamped; if in standing camp, this allowance should be increased, as men should be encouraged to wash themselves as much as possible.

114. If the banks of the stream or pond are steep, they must be cut down so as to allow the animals to drink easily. If the soil is muddy branches of trees, fascines, and stones should be let down to prevent the animals sinking in the mud. A horse, bullock, or mule drinks about 1½ gallons at a time, and takes about two minutes to drink, or, if unavoidable confusion be allowed for, about three minutes. The time requisite to water any number of animals may therefore be easily calculated by the number that can drink at one time is known. If many animals have to be watered, and the frontage is small, the hours at which each corps is to water should be laid down, to avoid unnecessary crowding.

115. An officer should invariably accompany all cavalry parties, and instructions should be given that each horse as soon as he has drunk should leave the water, and the party should fall in at a little distance clear of the next comers.

116. If the animals have to be watered at a very shallow stream, it should be deepened, either by making dams or by excavating the bottom; animals drink more rapidly when the water is from 4 to 5 inches deep than if it be shallower.

117 There are three kinds of pumps generally used for military purposes.

1. A small hand, lift and force, pump with flexible hose. This will draw water from 18 feet and throw it about 16 feet, working with a lift of 18 feet and a throw of 7 feet (the heighth of an ordinary water cart); it will yield 7 gallons per minute.

2. The Norton tube well. This consists of tubes driven into the ground with a monkey, and with a pump screwed on the top. One of these wells takes about 3 hours to fix it; it will yield about 7 gallons per minute, and keep three horses drinking at one time. *These pumps are very useful in searching for water.*

3. The "Bastier Pump" is a pump with an endless chain, working over a wheel; it yields from a depth of 45 feet (worked with two men), 2,200 gallons per hour.

118. If the water supply is from wells, troughs should be provided for the animals to drink out of. These may be made by simply excavating the ground and roughly paving it with stones, or they may be made of wood or sheet iron if it can be procured.