employed by the aborigines elsewhere in old Canada, it may be fairly concluded that the Southwold earthwork was of this description.

In the nature of the ground or of the situation there is but little to indicate any reason why this particular place was chosen by the Indians for defensive purposes. Usually, as has been frequently pointed out, places of this kind occupy moderately high land, near to, or forming the bank of some stream. A possible exception was referred to in our last report, where mention was made (pp. 11 and 12) of embankments on the bottom land of a branch of Batteaux creek, in Nottawasaga; but in that case the little tributary was at any rate available for fishing purposes, and, as was remarked, the remaining embankments may have at one time extended up the adjacent hill. Here the case is quite different there is no high land in the neighborhood, and the only water consists of the outflow of a strong spring which rises at a short distance south.

Although the Southwold works have been mentioned in several publications at intervals during the past twenty or twenty-five years, I am not aware that any measurements have been taken. At any rate, the following are the results of a visit paid to the place last May, in company with Dr. Tweedale, jun., then of St. Thomas, but now of Salem, Michigan. Unfortunately for cur purpose a heavy rain continued to fall nearly all the time we were on the ground; but as the proprietor, Mr. Henderson, has kindly consented to give the Canadian Institute the first opportunity to make a thorough examination of the place next

season, any mistakes made last summer may be rectified.

Apparently, the area enclosed by the double embankment, which forms the Southwold earthworks, is circular, but the tape line proves it to have a longer axis from north to south than from east to west, the respective measurements being 390 feet, and 330 feet from base to base of the outer slopes. The two banks are not equi-distant all the way round, as may be seen from figure 1. at A, B, O, D, E, F and G. The greatest amount of uniformity lies between the points A and H, where a width of about  $23\frac{1}{2}$  feet is maintained throughout nearly onefourth of the whole circuit. The northern portion of the work widens until the distance is upwards of 30 feet at F. But it is on the western side that the banks are farthest apart, varying from 28 feet at B to 44 feet at C and diminishing to 37 feet at D. Both within and without the enclosed area, the ground is level, except where, for a distance of 160 feet, the little stream in freshet moods has cut for itself a gully 10 feet below the top of the bank or about 7 feet below the general level where it emerges at the north-west. The general height of the banks is about 3 feet. In some places, as at a little east of where the stream enters, both banks are 3 feet 8 inches high. At the western side of the creek entrance, the outer bank is the same height, but the inner one is only 3 feet. At A the outer bank is 3½ feet high, and the inner one 3 feet. Neither are the banks of uniform width. At a point nearly north-east near F, G, each measures across its base 6½ feet; the distance from crown to crown being 25 feet, and the measurement over all being 37 feet, while at the north-west the outer bank is 12 feet wide at the base.

Near the south where the stream enters the enclosure, the configuration of the earthwork would seem to indicate the former existence of a gateway. The ends of the banks as they face each other on opposite sides of the stream are somewhat squarely shouldered, the exterior opening being 7 feet wide, and the interior one 10 feet wide, while the passage narrows to 5 feet in the middle. About half of the stream's course, through the enclosed ground, is but little below the surface, but, as already mentioned, 160 feet from its exit it flows through a channel which deepens to nearly 10 feet. The gap in the banks could be easily strengthened by means of logs and branches extending from side to side.

palisaded north side



sent state palisaded, e methods