

rescue from oblivion of some of its forgotten heroes would be not the least reward of the patient inquirer in these unfrequented paths. If what Jules Verne calls *la decouverte de la terre*, that is, the gradual ascertainment of the physical features, extent and habitability of the globe, be worthy of being classed as science (and in what scientific society is not geography recognized?), then what the old regime has contributed to the opening up and civilization of this continent is no scanty share. No less than ten states of the Union, and every province in Canada, save British Columbia, were first occupied by French pioneers, first described by French writers. And in this record of exploration and colonization, extending from 1534 to 1764, we find such names as Cartier, Champlain, La Salle, Duluth, Iberville, Joliette, Marquette, La Mothe, Cadillac and those of many another to whom mankind is deeply indebted. This is the merest outline of what, if a history of science in the new world were undertaken, the inquirer would find helpful and more or less valuable in the records of the northern dominion. On another occasion I hope to give some details from these records as indications of their scientific worth.

BRITISH STONE CIRCLES—IV. SOMERSETSHIRE AND DORSETSHIRE CIRCLES.*

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ONE of the most interesting groups of circles in England is situated at Stanton Drew, about seven miles south from Bristol. It comprises the remains of three separate circles, two of which have short avenues, a cove, or group of three stones, like those at Aberly and Arbelow, a large single stone to the northeast, like the "Friar's Heel" at Stonehenge, and two other stones at a greater distance; and, that these were all parts of one great whole, and were not constructed without reference to each other, is shown by the facts that a line from the "cove" in a direction fifty-four degrees east of north will pass almost exactly through the centre of the great circle to the centre of the smaller circle to the northeast of it, while a line from the centre of the southernmost circle in a direction about twenty degrees east of north will pass almost exactly through the centre of the great circle to an outlying stone called "Hauteville's Quoit."

This latter stone is the first which is encountered on the road from Bristol, and soon after passing it the remains of the great central circle and of the smaller northeastern circle, with the short avenues attached to them, will be seen in a meadow on the other side of the little river Chew, which is crossed by a bridge near by. The northeastern circle is ninety-seven feet in diameter, and consists of nine stones, and there are, besides fragments, eight other stones in the short avenue which goes from it in a direction a little south of east. On the south of this avenue, but not connected with it, another avenue, of which only five stones remain, leads in a southwesterly direction to the great circle, which was about 368 feet in diameter, and of which only twenty-four stones remain; these are, necessarily, a considerable distance from each other, so that it requires a little care to follow the circumference of this circle. The nearest part of the southern circle is 460 feet from the outside of the great circle, and its diameter is 145 feet (which is also about the distance between the circumference of the great circle and that of the northeastern circle); twelve stones of the southern circle remain, but all fallen, and it is cut through by fences, and is, consequently, more difficult to find, and to

trace when found, than either of the others. The "cove" is 470 feet, eight degrees north of west, from the circumference of the southern circle, and is not far from the church; it consists of three stones, two upright and one fallen, which form three sides of a square, like the coves of Aberly and Arbelow, but it differs from them in facing southeast instead of northeast. Some have thought these stones to have been part of a sepulchral chamber, but they are too thin in proportion to the height of the tallest one (ten feet), and could only have been covered by a very large mound, of which no traces remain; this, however, is a question respecting which the visitor can form his own opinion. If not covered they might have formed a sanctuary open to the rising sun in winter, while the circles were devoted to his worship in summer.

The northeastern circle is better preserved, and is formed of larger stones than the rest of the group, some of the stones composing it being nine feet high, and broad and thick in proportion.

The measurements and compass bearings (true, not magnetic) given here are mostly taken from the beautiful plan made by Mr. Dymond, C.E., F.S.A., and published some years ago in the *Journal of the British Archaeological Association*.

It has been suggested that the avenues are remains of a number of circles concentric with and surrounding the northeastern circle. Mr. Dymond shows pretty conclusively that they were avenues and nothing else, but the visitor may investigate this point for himself.

At Wellow, seven miles south from Bath, and about ten east from Stanton Drew, there is a large tumulus with a long gallery and six small side chambers, built and vaulted with small stones uncemented.

In passing from Somerset to Dorset we find no stone monuments equal to those just described. At Winterbourne Abbas, four or five miles from Dorchester, is a small circle called the "Nine stones," twenty-eight or thirty feet in diameter (not in height as stated, by the Post Office directory), six stones only remain, two of which are six feet high, the others half that size or less. Warne, in his "Ancient Dorset," mentions "a tenth stone which the eye detects just peeping through the long grass on the northeast side."

At Gorwell, on Tenmant's Hill, four or five miles beyond Winterbourne Abbas, and about ten southwest from Dorchester, is a ring consisting of eighteen stones or fragments, all prostrate, the largest being eight feet long; the figure which would touch most of them, so far as they are at present uncovered, would be an oval, of which the diameters would respectively be eighty-seven and seventy-eight feet, but they are much overgrown with turf, and, if cleared, it might be found that a circle of from eighty to eighty-two feet in diameter would touch most of their original positions. I was not able to find any outlying stone or other remarkable feature to the northeast of this circle, but there is a thick plantation on that side, which shuts out the view of the surrounding hills, and within which a stone or stones may be buried; there are, however, two outlying stones about 140 feet south from the circle.

At Gorwell, about half a mile southeast from the circle just described, are the remains of a sepulchral chamber and tumulus, with three other stones called the "Grey Mare and Colts," and at Portisham, two miles from Gorwell, is a dolmen called the "Hellstone," which appears to have been inaccurately "restored." There are also remains of a circle or circles at Poswell, six miles southeast from Dorchester, and earthworks nearer that town, known as "Maiden Castle" (a very fine camp), "Poundbury" and "Maumbury Ring."

*I. Abury appeared in No. 529, March 24.

II. Stonehenge appeared in No. 537, May 19.

III. Derbyshire Circles appeared in No. 545, July 14.