PROCEEDINGS
OF THE
GEOLOGICAL & POLYTECHNIC SOCIETY
Of the West-Riding of Yorkshire,
AT THE EIGHTEENTH QUARTERLY MEETING, HELD AT
WAKEFIELD, ON MONDAY, 4TH OF JULY, 1842.

On the motion of HENRY BRIGGS, Esq., seconded by
THOMAS WILSON, Esq.,
WILLIAM WEST, Esq. was called to the Chair.

Mr. WEST said it would have been more agreeable to him
if some one else had been elected president, but as he had
wished well to the Society from its commencement, he thought
he could not better show that good will than by complying
with their wish. He was sorry to see such a small attendance,
but he thought the circumstance could be well accounted for.
The unfavourable weather had, he knew, detained some in
Leeds; and some had only just left a long and laborious,
though, he must add, an interesting meeting of the British
Association, at Manchester. He trusted, however, that when
they next met it would be in greater force. He hoped that the
character of the Papers which would that day be read, would
increase the number of the Society's members.

The following gentlemen were elected Members of the
Society:—
Rev. WYNDHAM MADDEN, M.A., Woodhouse, Huddersfield.
THOMAS FIRTH, Esq., Toothill, Huddersfield.
THOMAS MASON, Esq., Copt Hewick, near Ripon.
The following resolution was then passed, on the motion of Mr. Brakenridge, seconded by Mr. Hartop:—

That the thanks of the Society be given to the Directors of the Proprietary School, for the use of their Hall.

The Secretary reported that Mr. Hartop and himself had attended the meeting of the British Association in Manchester, as representatives of this Society, and said, that according to the arrangements made at Sheffield, this meeting was appointed to be held on the Monday succeeding the close of the sittings at Manchester, in the expectation that some of the geologists who were there would attend; but he regretted to say, that owing to the Installation of the Duke of Northumberland taking place this day, Dr. Buckland, who had signified his intention to be present, had been obliged to leave Manchester on Saturday, and the same circumstance had called Professor Sedgwick away at a still earlier day.

The Chairman, in alluding to the subject of the meeting of the British Association at Manchester, said that the next meeting of that body would be held at Cork, in Ireland. They had very narrowly missed having it at York, in accordance with an invitation that had been sent from that city. He would take this opportunity of saying, that if the members of the Geological Society wished to have the meeting of the British Association held in Yorkshire in 1844, they ought to attend the meeting in 1843, and give an invitation.

The following Paper was then read:—

ON THE RELATIVE PROPERTIES OF IRON, MADE BY THE USE OF COLD AND HOT AIR BLAST IN THE SMELTING FURNACE.—BY HENRY HARTOP, ESQ., OF BARNBOROUGH HALL, NEAR DONCASTER.

In the early part of the year 1829, the use of hot air in the smelting furnace, for the manufacture of cast iron, was