Esq., Secretary of the Society of Antiquaries, an essay "On the Condition of Britain, from the descent of Cæsar to the coming of Claudius; accompanied by a Map of a portion of Britain in its ancient state."

The following Articles were exhibited:—

By Mrs. Moss, Otterspool, three large and very elaborate Brass Dishes, of the same description as that exhibited at the Fourth Meeting by Mr. Robin.

By Joseph Mayer, Esq., F.S.A., several Dishes of a similar kind.

Mr. Mayer also exhibited, through the kindness of Thos. Birchall, Esq., a large collection of Original Deeds relating to the estate of Ribbleton Hall, near Preston.

Mr. Mayer also exhibited, from his own collection, a most beautifully executed Miniature Sculpture, in hone stone, by Albrecht Durer. This miniature represented the wife of the Artist, and the minute delicacy of the finish of every part showed the great applicability of hone stone for the purposes of art.

W. Stuart, Esq., of Springfield, Knotty Ash, sent for exhibition, in illustration of Mr. Lamb's Paper, a Stem of the Cotton Plant mounted as a walking stick.

In illustration also of Mr. Lamb's paper, Dr. Hume called attention to the travels of Sir John Maundeville, and read the very curious and marvellous tale of the lamb-bearing tree.

A large collection of Original Letters, Orders, &c., sent by Sir Philip Egerton, several of which were embodied and others alluded to in his Paper, were also laid on the table.

The following Papers were read:—

I.—Cotton and the Cotton Trade.

By David Lamb, Esq.

Cotton being that commodity which now exceeds every other in constituting the commercial and manufacturing greatness of the kingdom, and Lancashire being the principal seat of its enterprise, I presume that I cannot be far wrong in supposing that a sketch of the Cotton Trade will excite some interest in this society. Many of the essays read before you claim attention from their scientific or their antiquarian character. My subject has few such associations to recommend it; but viewed under a social or economic aspect it becomes highly important.

It is estimated that Great Britain contains nearly four millions

of persons who are, some wholly others partially, dependent on the Cotton Trade. It also contributes largely to the support of seafaring men who are engaged in bringing the article from foreign countries. Neither is the number of persons living principally by this branch of commerce more remarkable than its fruitful means of rewarding their industry. It is indeed a vast source of national wealth. A pound of the lowest quality of Cotton, which can now be bought for 4d., is manufactured into cloth that sells for 9d. Even here labour produces more than the cost of the material; but, if we take the finest quality, the result staggers belief. A pound of Sea Island Cotton, now worth 2s., is made into lace which the Nottingham manufacturer sells for £11 4s. The increase here is 112 for 1.* I mention these as two extreme cases; but my information does not enable me to say where the true or medium profit may lie. I believe this would be a very difficult question to settle; but, with these data, strike the medium where you will, you cannot do less than prove the vastly productive power and the beneficent influence which this trade exercises on the destiny of the British nation.

The authorities that I have consulted regarding the early history of the vegetable, seem to agree that this is at once very remote and very scanty. M'Culloch traces it up to Herodotus, who, he says, speaks of "wild trees in India that produce a sort of wool superior to that of sheep," and that "the natives dress themselves in cloth made of it." Dr. Ure quotes Arrian for an account which he gives of the voyage of Alexander the Great's admiral, Nearchus, who, in sailing down the Indus and along the coasts of Persia to the Tigris, observed that the clothing of the inhabitants was made of stuff that grew upon trees. Both M'Culloch and the Encyclopedia Britannica

* A piece of the finest Nottingham lace, weighing one ounce and a quarter, contains 14 yards, and is sold for 17d. a yard. Between 10 and 12 per cent. of the Cotton is lost in the process of manufacture: making allowance for this, the result will be found as here stated.

state that Arrian mentions some Cotton cloth which had been brought to Rome by soldiers returning from Asia. This would throw its first appearance in Europe as far back at least as the second century of the Christian era. There is no doubt that it is of Eastern origin, yet the progress of its manufacture in Asia seems never to have been aided by machinery, unless the distaff and looms of the rudest construction be elevated to that character.

Claims to the introduction of Cotton manufacturing into Europe have been advanced by the Italians and also by the Dutch. Neither of these nations, however, make out a feasible title to the honour.

About the middle of the 17th century, Cotton was brought in small quantities into Lancashire, from London, where it was purchased. At that time there was an extensive linen trade in Manchester. The yarn was imported from Ireland and Holland, and was woven by persons living in the country. These weavers employed their wives and children in spinning the Cotton by single yarns. The yarn they made of it was poor, but sufficient for the weft or transverse thread of the web, and for this purpose only was it used;—the warp or longitudinal thread was of flax. Weaving was a rural occupation, often varied with agricultural work; and when at length the web was completed, it was taken to Manchester for sale, or for the payment of wages, as the case might be.

The manufacturing of Cotton seems to have lingered long in this primitive state. It does not appear to have attracted much attention till the 18th century was far advanced Doctor Percival of Manchester says, that at the accession of George III, in 1760, the entire value of all the Cotton goods manufactured in Great Britain did not exceed £200,000 a year! Wool, flax, and silk were severally much more important objects of commerce. Up to that period, the manufacture of Cotton seems to have advanced little beyond the state in which it stands to this day in India.

A wheel which spun a single thread more expeditiously than the distaff appears to have been the best instrument used in England

till about 1767, when an ingenious mechanic named Hargraves invented a machine which he called a "jenny." At its first production it spun about 20 threads, and successive improvements brought it in time to spin about 100. A year or two after Hargraves' machine had become known, the celebrated Arkwright brought forth his spinning-frame, which was followed by the carding cylinder. These gave prodigious acceleration to the making of yarn. Baines, in his History of Lancashire, disputes Arkwright's title to be considered the original inventor of the spinning-frame; others contend as sturdily that he was the real inventor. Be this as it may, the principle of the machinery is still maintained, amidst a number of subsequent improvements.

It is a common remark that misfortunes follow genius. Poor Hargraves was assailed by a mob, who destroyed his machines wherever they were found, broke into his house, shattered his furniture, and compelled him to flee to a distance, where at length he died in a workhouse. "Arkwright's machines were reckoned by the operatives as even more adverse to their interests than those of Hargraves, and reiterated attacks were made on the factories built for them. But, strange as it may appear, it was among the manufacturers that the greatest animosity existed against Arkwright; and it required all that prudence and sagacity for which he was remarkable to enable him to triumph over the powerful combination that was formed against him. They harrassed him with actions in the courts of law; raised factious opposition to measures in parliament that would have benefited him; and it is a fact, that a large factory erected by him near Chorley was destroyed by a mob, in the presence of a powerful body of police and military, without any one of the civil authorities requiring them to interfere to prevent so scandalous an outrage."*

A preacher disposed to illustrate Holy Writ by recent history

* Ed. Rev. 46—13 et seq.

would here find ample occasion to exhibit human passions and human frailty. Of all men in existence, the objects of persecution were the best friends of the classes who persecuted them. Before their inventions, it is doubtful whether 30,000 persons were employed in all the branches of the Cotton manufacture; whereas, in consequence of those inventions, millions are engaged in its different departments.

Dr Ure says* that the first goods of English make of which the warp was Cotton, were manufactured at Derby, in 1773, by Messrs. Strutt and Need, the partners of Arkwright. But after they had caused a considerable quantity of these genuine British calicoes to be woven, they discovered that an existing law, *for the encouragement of the arts*, imposed on such goods when printed double the duty of that chargeable upon mixed fabrics of linen and cotton. The same sapient law prohibited the sale of these home-made calicoes in the home-market. It required a long and expensive application to the legislature to procure the repeal of these preposterous enactments.

The following account of this Repeal Act, the 14 Geo. III. c. 72, will sound comical to English ears of the present day. "Whereas a new manufacture of stuffs, made entirely of Cotton spun in this kingdom, has been lately introduced, and some doubts were expressed whether it was lawful to use it, it was declared by parliament to be not only a lawful but a laudable manufacture, and therefore permitted to be used, on paying 3d. a square yard when printed, painted or stained with colour."

As soon as Arkwright's patent had expired, Crompton, another man of ingenuity, produced his machine called the mule. This combined the advantages of the jenny and the spinning-frame, and probably derived its name from its mongrel character. It remains to this day, one of the most useful and striking objects of Cotton

* Ure's Cot. Man. vol. i, p. 190 et seq.

machinery. It has undergone many modifications; but, in its most improved state, I understand that one adult person with the assistance of three children, can spin by means of it, as many as 2000 threads at a time.

The mechanical celebrity of these men was closely followed by that of Watt. Arkwright and others had supplied the means of producing a multitude of threads by one spinner. But at first they looked for power to drive their machinery only to horses and water-wheels. Running waters were seldom found in suitable localities, and horses were very expensive. Watt's invention brought the power to the situation where it could be most advantageously used, placing it at once in the centre of a population trained to manufacturing habits, and thus brought together the different branches of manufacture; thereby giving facility and effect to their mutual operations.

Watt had early turned his thoughts to adapt the steam-engine to rotative motions, but the first one used for the purpose of spinning Cotton was in 1785. This was at Nottingham; nor was it till 1789 that one was introduced at Manchester.

In 1787, a clergyman of the name of Cartwright invented a mode of weaving by machinery. His loom seems to have been a very crude piece of mechanism, but it proved the possibility of adapting machinery to the purpose; and, with the various improvements it has undergone, it constitutes the "power-loom" of the present day. The advantage which the power-loom has over the hand-loom is, that a weaver can attend to two of them and produce about three times the quantity of cloth which he could from the other. In the production of coarse fabrics also, a less expert workman is sufficient, and generally the work is more uniform and better done. Both fine and ornamental fabrics are now made in the power-loom; but for the finest and most fanciful, the hand-loom is still necessary.

The names of Kelly and others stand distinguished among the

early improvers of Cotton machinery, but I could not mention many of them without extending my sketch beyond proper limits. Ingenuity continues to be tasked to its utmost extent for the advancement of Cotton manufactures. Down to the present time, no year has passed without bringing forth a variety of projects and inventions. The majority of adventurers in this lottery have drawn blanks; but sufficient prizes have turned up to sustain a constant stimulation among inventors.

Till near the close of the eighteenth century, the supply of Cotton was derived from India, the West Indies, the Brazils, Turkey and the island of Bourbon. Had manufacturing enterprise been limited by the production of these countries, it is probable that the mechanical achievements of Arkwright and Watt, splendid as they are now under full developement, would have been much less conspicuous. But fortunately, about 1790, the cultivation of Cotton was introduced into the southern part of the United States. The soil and climate proved congenial; the planters were energetic and enterprising; and the result was the production of quantities and qualities which would have appeared incredible had they not been realized.

It was from Georgia or South Carolina that exports of it were first made, and they were mostly sent to London, that port having been the principal market for the prior productions of these States. Its increase was at first slow, for it had to supplant the indigenous productions of the country. Were I to detail the particulars of importation according to the minute statistics which command interest on the Liverpool Exchange, I should become very tiresome in my place here. For the present purpose it will be sufficient that I show the increase of imports, by stating those of several years at distant intervals. It does not appear that the Cotton imported into the kingdom in any one year previous to 1800 amounted to more than 250,000 bales:—

In 1810	it was	560,000
„ 1820	„	577,000
„ 1830	„	872,000
„ 1840	„	1,608,000
„ 1849	„	1,905,000

Of the quantity imported in 1849, 1,477,000 came from the United States, and 428,000 from all other countries; that is to say, the United States supplied more than three-fourths of the whole. It may be remarked too, that while the quantity from the United States has been progressively though irregularly increasing, the amount from other countries collectively has been diminishing.

Of the quantity exported, I shall satisfy myself by saying, that in 1849 it amounted to 256,000 bales. This is the largest amount exported hitherto known, but the import having been proportionably great, the ratio between the two is little affected.

In 1824, Mr. Huskisson stated in the House of Commons, that the total value of the Cotton goods manufactured amounted annually to 33½ millions sterling. I am not aware of any official estimate that has been made more recently, but the import that year was hardly 600,000 bales, whereas in 1849 it amounted to 1,900,000. Of course the value of manufactures must have increased to a very great extent. Truth, however, requires me to say, that the increase of value must not be estimated entirely by that of imports. Abundance of the material and the ingenuity of manufacturers have concurred to afford the goods at greatly reduced prices.

To those who cannot feel interest in mercantile details, and not less to those who are curious on the subject of vegetation, it may be acceptable that I diversify my sketch with a word about the Cotton plant. It belongs to the family of Mallows and has received from Linnæus the name Gossypium. It is a shrub of which there are several varieties. In some cases, particularly in dry seasons, it rises no more than two feet from the soil; in others it attains the

height of six feet, or more. In the United States it is destroyed by the frost of winter, and is raised from seed every year. Within the tropics it is perennial, but it becomes less fruitful after standing two or three years, and is therefore cut down and replanted. The stem and the disposition of the branches somewhat resemble the Dahlia with which we are familiar, though in botanical arrangement the plants stand far apart. The blossoms are at first yellowish, soon fading into red and brown. The pod or boll which follows, bursts into several sections and discloses the Cotton. Few vegetable productions display more beauty than a Cotton field in full bearing.

In attempting to condense my subject within the limits usually observed by those who read essays here, I am sensible that I have given a very cursory and imperfect view of it. My intention has been to present a general, or, if you will, an introductory, sketch of the Cotton Trade. I know that there are several members of our Society more familiar than I am with many of its departments. Were they to take up these separately and treat them more in detail, full justice might be done to an important subject. Thus, one paper might be upon the Nature and Cultivation of the Cotton plant; another on the Gradual Changes in the Manufacture of the article; another on the Local Circumstances which give Lancashire a pre-eminence in the matter;—the Cotton Trade might, in fact, be viewed under a great variety of aspects. I have left unnoticed its relations wherever Great Britain is not concerned. But, before concluding, allow me to say that Cotton, notwithstanding its commercial insignificance sixty years ago, is at this moment not only the greatest staple of British commerce, but it is the most universally useful substance known to modern times. It is the subject of traffic and manufacture over every country of Continental Europe. The consumption of it in the manufactories of the United States is now equal to what it was in Great Britain 25 years ago. Throughout the most of Asia it seems indispensable, and constitutes the clothing

of countless multitudes. Indeed, I hazard nothing when I say that there lives not a human being, within the pale of civilization, who is not more or less indebted to this commodity for his comfort and enjoyments.

At the conclusion of the Paper an interesting discussion took place, in the course of which Mr. E. Heath mentioned that when, about 60 years ago, the first bale of United States' Cotton was imported into Liverpool, the ship was put under stop until the Board of Customs in London could be consulted as to its admission. Mr. Heath also mentioned, to give an idea of the immensity of the crop now raised in the United States, that in 1849 the total (which was the largest ever known) exceeded 2,700,000 bales, which, at 5½ bales per ton, gives 500,000 tons weight of a material which not infrequently affords a figurative expression of lightness. Of the American crop, the United Kingdom receives on an average seven-twelfths.

II.—Some Remarks on the Lords Lieutenant of the County Palatine of Chester, from the Restoration to the Year 1690.

By Sir Philip Grey Egerton, Bart., M.P.

It is somewhat remarkable that the Historians of the County Palatine of Chester, previous to the publication of Ormerod's great work, have omitted all mention of the Lords Lieutenant of the County. This is the more singular, since throughout the varied events of the seventeenth century, political and social, in which the Counties of Lancaster and Chester were deeply interested, the office was one of the highest importance and responsibility. Mr. Ormerod (alluding to the silence of Sir Peter Leycester on this subject,) has given a short account of the succession to the office, from the year 1574 to the date of his work, when George James, 4th Lord Cholmondeley, was Lord Lieutenant.* The office appears to have been held conjointly with the Lord Lieutenancy of the County Palatine of Lancaster, until the death of William Richard George, 9th Earl of Derby, and

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* Ormerod, vol. *i*, p. 67.