THE WATFORD OBSERVER. SATURDAY, FEB. 28, 1880.

ESTABLISHED 61 YEARS.

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JOSEPH AUSTIN

announce that his Annual STOCK TAKING SALE will commence ARY THE 31st, and terminate on SATURDAY, 29TH FEBRUARY. J. A. od that this is a GENUINE YEARLY SALE, entirely to clear SURPLUS p it another Season, which will be found a great advantage to all

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oths, 1/4d. worth 1/9
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9d. per yd. worth 8½d.
from 1/11½d. per yd.
Silks, to be cleared
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s very cheap
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29/6, worth 52/-

CASH AGAINST CREDIT.

10 per doz., worth 5/9
ths, 6½d. per yard
ints, 3½d., worth 5½d.
5½d.
Yard wide, 10½d.
yard
ing, 9½-in., from 12½d.
y cheap, to clear.
72-in. wide
ts, 5/6 per pair.

ually cheap

GREAT BARGAINS.

worth 6/6
coats from 9/6
9/6

3/11, worth 5/9

from 2/6, worth 3/9
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EMNANTS AT HALF-PRICE.

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y to inform the Gentry and Inhabitants of Watford and neigh-
he has a large and varied Stock of FAMILY MOURNING
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LOAKS, COATS, SILK & CRAPE HAT BANDS,
For Sale or Hire.
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who study economy and buy for ready money.

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experience in the Leather Trade enables him to offer superior Goods
Durability and Workmanship, suitable for the country trade.
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Job, or Old Stock kept, but genuine New Goods at LOW PRICES

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AT LOWEST CASH PRICES
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Cleaned and Repaired, and promptly Returned.

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FREDERICK BLACKMAN,
CORN, SEED & FLOUR MERCHANT
THE GRANARIES, WATFORD.
AGENT FOR MESSRS. HUNT AND SON, LIMITED, BOW BRIDGE MILLS, STRATFORD, the celebrated manufacturers of all kinds of ARTIFICIAL MANURE.

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THE very best LONDON WHITES, and superior HOUSEHOLDS on sale in quantities to suit all purchasers.

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PIANOFORTE, HARMONIUM,
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MUSIC WAREHOUSE,
176, HIGH STREET, WATFORD.
PIANOFORTES Tuned and Repaired. Violin and Violoncello Strings, &c.
AGENT FOR THE
ESTEY AMERICAN ORGANS,
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A Household Medicine
DR. BROWNLESS'S Dandelion Bilious and Liver Pills are a safe and effectual remedy for bile and all disorders of the liver and stomach, and from their mild action are peculiarly adapted for females and persons of weak constitution.—Sold in Boxes at 13½d. and 2s. 9d. each.

Safeguard to the Lungs!
DR. Golding Bird's COUGH LOZENGES will cure any cough.
In Boxes 7½d. 13½d., and 2s. 9d.

Frank's Neuralgic Powders
FOR the Immediate Relief and Cure of NEURALGIA AND RHEUMATIC PAINS in the Head and Face.
Sold in boxes at 1s. 1½d., 2s. 9d., and 4s. 6d.
PREPARED ONLY BY
H. OLDFIELD,
And sold by Messrs CHATER, Chemists, High-street, Watford; and Mr. H. T. JEFFERY (Late Sanderson), Chemist, High-street, Watford.

ESTABLISHED 1850.
ANDREWS & SONS,
Builders, House Decorators,
AND
GENERAL CONTRACTORS,
142 & 144, High Street, Watford.
DEALERS IN ALL KINDS OF BUILDING MATERIALS.

T. COLLINS,
ZINC, IRON & TIN PLATE WORKER.
Zinc & Tin Spouts fixed at 5d. per foot.
REPAIRS DONE DAILY.
WORKSHOPS, WATER LANE, WATFORD.

TRANSVAAL.—The Daily News announces the formation of a company, under the title of Messrs. Pigott and Co., to sell cattle to the Transvaal. The first consignment will leave Cape Town in a few days, and others will follow at regular intervals. The cattle will be purchased in the Transvaal, and since our annexation there we did the same from time to time, until, owing to the war, we had not the least idea of the value of cattle in the case. I have now much pleasure in stating to you that we have purchased 50 head, and since our arrival here we did the same, remarking for fat and young cattle, and the result of each market was that we realised on the case. I have now much pleasure in stating to you that we have purchased 50 head, and since our arrival here we did the same, remarking for fat and young cattle, and the result of each market was that we realised on the case. I have many more bookings, whilst the cattle are now arriving, and shall forward another lot on the 20th inst. In making this statement I only have to refer to reader full justice to those who are now in the Transvaal, and the satisfactions of food are sent out to the Colonies by agricultural firms. We are also informed that the sale of the above statement, requesting only not to publish my name.—Estates Gazette, and Live Stock Journal, Transvaal.

EPPS'S NEW MILLS.—"Building News" says:—"These extensive premises have a total frontage to Holborn Viaduct of 200 feet, with a depth of 100 feet from the semi-basement floor to the parapet varies from 80 feet, while the ground floor alone about 13,000 square feet, the whole forming an imposing block of buildings, which are viewed from the Thames or the building thoroughfare. The total area of flooring extends to nearly three acres, and we believe the area of glass in the windows is about 11,000ft."

EPPS'S COCOA.—"The Civil Service Gazette" says:—"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected cocoa, Mr. Epps has provided our breakfast-tables with a delicately flavoured beverage which may save us many heavy doctors' bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."

EPPS'S COCOA.—"All the Year Round" says:—"Having now disposed of fancy chocolates, let us enroll to Mr. Holbrook Gaskell, Mr. Epps's cocoa manufactory, where may be studied the making of cocoa on a large scale, owing alike to the purity of the value of these articles, not as luxuries, but as actual food."

EPPS'S COCOA.—"Morning Post" says:—"Mr. James Epps and Co., the proprietors of the well-known homoeopathic chemists, have just added to their factory upon Mr. James Epps, the chemist, and founder of the firm, took advantage of the opportunity of making extensive cocoa duties to introduce improved cocoa as a satisfactory and wholesome food, giving a name to the brand for this form of cocoa has increased year by year until the annual consumption has become enormous. Mr. James Epps's large existing works proving too small, the new works in Holland-street have been built on a large scale to meet the requirements of an ever-increasing consumption."

EPPS'S COCOA.—"Land and Water" says:—"Through the kindness of Messrs. Epps we recently had an opportunity of seeing the many complicated processes through which the cocoa nibs pass before they are fit to sell, and the machinery being interested and highly pleased with what I saw during my visit to the factory, I intend to give a brief account of what we saw and the way it is manufactured by Messrs. Epps in the hope that a description of the process might be of interest to the readers of 'Land and Water.'"

EPPS'S COCOA.—"Court Journal" says:—"In a climate so varying and trying as our own, in maintaining and invigorating the system daily diet cannot be too carefully and attentively studied. Advancing science has of late years enabled us here within the last few years been instrumental in adding several most valuable articles to our extremely short list of dietetic foods. Foremost amongst these should be ranged cocoa, which, although known here several centuries previously, only came into general use within the last few years. One of the first to contribute this now indispensable adjunct to our table was Mr. James Epps, whose 'Prepared Cocoa' has for some such just Popular for its excellent and nutritious character. Prepared originally on a small scale, it speedily grew into a notable and convenient form, and easy of digestion, it met a public demand, speedily became favourably known. Messrs. Epps produce some five millions of pounds of their cocoa a year, and their manufactory is the largest of its kind in this country."

EPPS'S COCOA.—"Cassell's Household Guide" says:—"We will now give an account of the process adopted by Messrs. James Epps and Co., manufacturers of dietetic articles, at their works in Holland-street, Blackfriars, London."

EPPS'S COCOA.—"The Tablet" says:—"This, as all exists, is now prominently before the public on behalf of cocoa that it not only stimulates but nourishes for more than one cup of it is used. We have referred to the wasted tissues in its 'flesh-forming,' and to its animal constituents, and we might have referred to the well-known 'Homœopathic Cocoa' prepared by James Epps and Co., these qualities are carefully preserved and rendered pleasant, eatable and easy of digestion. For this reason 'Epps's Cocoa' has a deserved reputation, and its popularity, with its consumption, is steadily increasing."

EPPS'S COCOA.—"John Bull" says:—"The inventive faculty of the last generation have undoubtedly become the daily necessaries of the present. A forcible illustration of this is to be found in the enormous increase in the consumption of cocoa year by year in great proportion to the facilities afforded by the cocoa factors. An idea of the vast extent of this industry may be gained by stating that the firm of Messrs. Epps and Co.—now all some few millions of pounds annually."

EPPS'S COCOA.—"United Service Gazette" says:—"Cocoa, prepared as directed, has received not only an acceptable addition to our traditional breakfast beverages, but a valuable addition to our list of articles are, from choice or necessity, tabooed; and Messrs. Epps's manufactory to have hit upon the particular form of cocoa best adapted to meet both requirements."

EPPS'S COCOA.—"Christian World" says:—"If I am to take cocoa, said I, 'I must know what it is made of.' I have examined Epps's cocoa, I went five into the mystery of its manufacture; I must see and judge for myself, and I am pleased to say that it is not compound; with this view I made my way to the manufactory of James Epps and Co., in Holland-street, Blackfriars."

EPPS'S COCOA.—"Morning Advertiser" says:—"In the middle of the seventeenth century an announcement was made in the London papers of that period, to the effect that 'out of Bishopsgate-street, at the Premises called the Bell, over against Broad Street, is called chocolate, to be sold at reasonable rates.' This is the first record we have of the introduction of cocoa into England. For a time it flourished as a fashionable drink, and then, like all fashions, dwindled. Nearly two centuries after, in 1832, the duties, which had been prohibitive, were reduced to a nominal sum, and the new tube advantage of re-establishing the popularity of cocoa was Messrs. James Epps and Co., Homœopathic Chemists. Under the name of 'Prepared Cocoa,' they introduced a valuable and delicate preparation of the nib, requiring no boiling, and was palatable and highly nutritious."

EPPS'S COCOA.—"Family Herald" says:—"The best makers—such as Messrs. Epps—sell a pure preparation."

EPPS'S COCOA.—"Naval and Military Gazette" says:—"Cocoa, which has long been used in other those of tea or coffee are now so generally acknowledged that the consumption of the former in the statistics in its consumption during recent years exceed that of the latter, which is doubtless due to the fact that popularise this now indispensable adjunct to our breakfast table was made by Messrs. James Epps and Co. since 1839, has been so continuously before the public and whose Homœopathic Chemists, have not only proved us the proverbial 'household words.' These whose business it has been to study the wants of Mother Earth's abhorrent and complex processes, and to note the rare and hid away knowledge which is daily becoming more considered ready for consumption, cannot but admit that the Homœopathic Chemists, Epps's productions have secured a fully deserved."

EPPS'S COCOA.—"News of the World" says:—"Cocoa, once only used as a beverage, like tea or coffee, and in no form before the public are those preparations in almost prohibitive duty was abolished, the total amount consumed in this country was less than half a million pounds. Since that time, the rage has grown alone, that of Messrs. James Epps and Co., the Homœopathic Chemists, sell annually coffee few millions pounds."

EPPS'S COCOA.—"Sunday Times" says:—"Messrs. James Epps and Co. were among the first to popularise the use of cocoa, and certainly no one usually enjoys the refreshing qualities of a cup of cocoa more than Messrs. Epps's productions have secured a fully deserved reputation."

EPPS'S COCOA.—"Civilian" says:—"In the 17th century cocoa was first introduced to Europe by the Spaniards, who brought it from their way into the English markets, chocolate was a favourite beverage with the fashionable world for a long period; it then fetched an almost fabulous price per pound. Since the duty was reduced to a nominal sum, it placed it within the reach of every class, cocoa is not only still considered a fashionable and expensive beverage, but is valued for its nutritive and dietetic qualities. One of the first to avail himself of the reduction by introducing cocoa in its present form is Mr. James Epps."

EPPS'S COCOA.—"Weekly Times" says:—"In wandering over their two acres of floor, and is struck with the simplicity and completeness of the arrangements, the regard for absolute cleanliness and faithfulness of machinery for food manufacture seem to be effected, the frankness with which the various processes are explained and shown, and the confidence displayed in preparing the cocoa from its initial nib state to its final form in the neat drab, Quaker-like looking packages."

EPPS'S COCOA.—"Weekly Register" says:—"Like Bass's ale and other things, which, in our mouths, have become literally 'as familiar as house,' both when it is known to be pure, and so popular, and is as generally approved as', is generally known."

EPPS'S COCOA.—"Mining World" says:—"The preparation of pure and nutritious articles of diet is, in point of philanthropy, noble work. The wear and tear upon brain and muscle in this age is very great, and the system cannot long do this without some compensating influence the old must be hopelessly and irretrievably broken up and worked collectively. Fresh air and more wholesome and nutritious diet must be had at any price. Both tea and coffee drink need great improvement. A few chemists have done public service in this respect. Mr. James Epps, in the preparation of cocoa in its various forms, has done more, perhaps, than any other person to supply the tables of even the poorest with a most agreeable and wholesome article of diet."

EPPS'S COCOA.—"Bell's Life" says:—"This is a great name in the art of philanthropy, noble monopolie chemist, and founder of the firm bearing his name, which has conferred a boon of a high order on the daily prepared form of cocoa in fact of the single cocoa compounds invented before the public."

EPPS'S COCOA.—"Joint-Stock Companies' Journal" says:—"It is one of Gardiner Epps's many claims to the gratitude of the working classes that he has called their attention to the excellent qualities of cocoa, and has thereby conferred a benefit upon the community at large. It is a well-known fact that many persons are debarred from the use of tea and coffee on account of their action upon the nervous system, and to such cocoa is admirably suited. In fact, cocoa is admirably suited to the medical faculty to be sometimes ill-advised enough to recommend their patients, and in hypochondriacal complaints and nervous disorders it is especially beneficial. Cocoa is also of great amount of nutrition; and its use should be encouraged by all those who have to undergo great bodily fatigue, for such cocoa extensively, and fully appreciate it; and we are pleased to know that the working classes generally follow their example. The most celebrated and successful chemist of the day has turned his attention to the production of cocoa in Mr. James Epps, of London. Having the most perfect machinery for the blending and preparation of the various forms of cocoa, whatever the requirements of the consumer may be, he supplies them as regards both prices and quality."

EPPS'S COCOA.—"Magnet" says:—"Messrs. Epps have been foremost in adopting every improvement in machinery brought in the trade, and they rank deservedly high among those who have contributed most to the wonderful development of the food supply."

WATFORD.

HERTFORDSHIRE NATURAL HISTORY SOCIETY AND FIELD CLUB.

The Anniversary Meeting of this Society was held at the Watford Public Library, on Tuesday evening, the 17th February, Gwyn Jeffreys, Esq., LL.D., the President, in the chair.

The President announced that Lieutenant Croft would not be at Hoo, during this session, in consequence of the illness of Mr. Hopkinson, who was not able to attend.

Lieutenant Croft then read the minutes of the last anniversary meeting.

HONORARY MEMBERS.

The following Honorary Members were elected :—Charles Cardale Babington, M.A., F.R.S., F.S.A., F.L.S., F.G.S., Professor of Botany in the University of Cambridge; and Rev. Thomas Hincks, M.A., Ph.D., F.R.S., F.L.S., F.G.S., Secretary of the Zoological Society.

TREASURER'S REPORT, ETC.

Lieutenant Croft then read the Report of the Council and Balance Sheet. The report was as follows :—

"The Council of the Hertfordshire Natural History Society and Field Club, in presenting its Fifth Annual Report since the foundation of the Society as the Watford Natural History Society and Hertfordshire Field Club, have much pleasure in announcing that the change which on the 1st of July took place in the constitution of the Society, has had very satisfactory results, both in the increased interest in the part of members in the eastern part of the county without having in any way detracted from the position the Society has attained, and the interest taken in it by the members, in the western part.

"During the year eighty-seven ordinary members have been elected; two ordinary members have been elected honorary members; four members have compounded for their annual subscription; eighteen members have joined, three after their election have declined to be members; one has been excluded from the Society for non-payment of subscription for two years, and the Council are required to have to record the loss of four members by death —Mr. Edward H. Ambler, M.R.C.S.; Mr. Robert Clutterbuck, F.G.S.; the Rev. F. W. Goadby, M.A.; and Mr. Alfred O. Sedgwick.

The number of the Society at the end of the year 1879 was as follows :—

	1878.	1879.
Honorary Members ..	10	12
Life Members	25	26
Annual Subscribers ..	138	193
	173	231

"Four parts of the Society's 'Transactions' have been published and distributed to the members during the year, making six parts of the second volume, which when completed will contain the proceedings to the end of the session. With the third volume will therefore commence the proceedings of the Society under the name it now bears.

"The following are the principal papers and lectures which have been read or delivered during the year 1879 :—

Jan. 9, at Watford—Poisons not always Poisonous: by Professor Attfield, Ph.D., F.C.S.

Feb. 13, at Watford—Anniversary Address; by the President, Alfred T. Brett, M.D.

March 13, at Watford—The Intricacy of Geology; by J. Logan Lobley, F.G.S., F.R.G.S.

April 10, at Watford—Bees and Bee-keeping: by the Rev. Theodore Wood, M.A.

May 13, at Watford—Resection of Meteorological Observations; by Wm. Marriott, F.M.S.

— Miscellaneous Observations taken at Wanstead House, Watford, during the year 1878; by John Hopkinson, F.L.S., F.M.S., &c., Hon. Sec.

— Report on the Rainfall in Hertfordshire in 1878; by the Honorary Secretary.

— Report on Phenological Observations in Hertfordshire in 1878; by the Honorary Secretary.

— Remarks on the Winter of 1878-79; by W. Marriott, F.M.S.

June 12, at Watford—Temperature of thirty Summers and thirty Winters at Hitchin; by William Lucas.

— The Basal Recovery of Silurian Rocks in Hertfordshire, and their relation to the Water-bearing Strata of the London Basin; by John Hopkinson, F.L.S., F.G.S., Hon. Sec.

— On a Boulder now in the Garden of the Boreham Institute; by H. George Fordham, F.G.S.

Oct. 2, at Hertford—Address; by the President, J. Gwyn Jeffreys, LL.D., F.R.S., F.L.S., F.G.S.

Oct. 21, at Watford—Animals which have become Extinct in Hertfordshire within Historic Times; by J. E. Harting, F.L.S., F.Z.S.

Nov. 6, at Hertford—Work for the Society; by B. Meadows, F.R.A.S., F.M.S.

Nov. 18, at Watford—Our British Beetles: A few Notes on their Collection and Classification; by Arthur Bennett, F.L.S.

Dec. 2, at Hertford—Some Observations on Spiders; by F. P. Campbell, F.L.S., F.E.S., F.R.M.S.

Dec. 16, at St. Alban's—Vegetable Homology: or, the Identity in Origin but Difference of Function of Plant Organs; by the Rev. George Henslow, M.A., F.L.S., F.G.S.

"Several short communications have also been read, and many interesting and other objects of interest have been exhibited.

"It will be seen that the papers read at the Watford meetings are quite equalled in number and value the average of those of former years; and it may be added that at no former period has the interest taken by the members of meetings been greater than in the past year. The last meeting in the year, held at St. Alban's, was also eminently successful, and the meetings held at other places occasionally held there has induced several of its residents to become members of the Society.

"The meteorological and phenological reports for 1878 have already appeared in the 'Transactions,' and the reports for 1879 will shortly be presented. The number of observers of periodical natural phenomena continues to increase, observations having been received from fifty-two stations in Hertfordshire, as well as at the former stations—Watford, St. Alban's, Harpenden, Ware, and Odsey.

"On the formation of the Museum of the Society, a visit was paid to the Museum of the Geological Survey of Great Britain, in Jermyn-street, London, where the Council were received by Mr. Henry H. Etheridge, F.R.S., the Palæontologist to the Survey, who gave an account of the origin of the Museum; showed how its collections were arranged, and kindly explained the mineral productions of the British Islands and our Colonies to purposes of use and ornament. On the invitation of Mr. Etheridge, a 'Practical Geology;' explained in detail the contents of what is known as the 'horse-shoe case,' which is devoted to the illustration of the rocks of Hertfordshire and their uses; and gave information on other objects in the Museum, including various models, and boring. Also on the Museum generally. About two hours were thus spent in the Museum, and under the guidance of Mr. Etheridge the members present had an opportunity of acquiring information which they could not have had in any other way, their appreciation of which was expressed by the cordial vote of thanks Mr. Etheridge received at the conclusion of the visit.

"A larger number of Field Meetings were held than in any previous year, all that were projected having been carried out; and, as far as the weather permitted, all were successful. Of the six meetings held, the first, second, and fourth were on fine days, and the third, fifth, and sixth on wet days. The following are the dates of these meetings, and the localities visited :—

May 3—Abbot's Langley and Leavesden.

— 17—Colne Valley Water works, and Colney Burtons and Hagden Lane Gravel Pits, Watford.

June 14—Harpenden, Rothamsted, and Redbourn Bury.

— 28—Tewin Water, Ayot Green, and The Pryth, Welwyn.

July 12—Chiltern Green, and Croft Hall, Luton.

"Four other meetings were held in conjunction with other societies. The second, in the neighbourhood of Watford, took place in conjunction with the Geological Association, when 100 members generally attended of all; at the third, at Rickmansworth Common Moor, which, owing to the very wet weather, was not very successful, about twelve members of the Quekett Microscopical Club were present; the fifth, the annual whole-day meeting, held in the neighbourhood of Welwyn, was attended by members of the Luton Natural History Society; and the sixth was held in the neighbourhood of Luton, by invitation from that Society.

"For hospitality kindly afforded at the field meetings the Society is indebted to Mr. Arnold, Bedbourn Bury; Mrs. Lucas, The Pryth, Welwyn; and Mr. John Cumberland, Luton. The thanks of the Society are also due to Mr. W. Whitaker, of the Geological Survey of England, for his conversazione on the Geology of Watford at the second field meeting, and explanations of the sections cut at the Rickmansworth Reservoirs, and at the 'Lower Testimonial Laboratory' at Harpenden.

"All these meetings, except the last, which was conducted by the Secretary of the Luton Natural History Society, were personally conducted by your Secretary, who desires to take this opportunity of expressing his thanks to the Society to suggest localities to be visited at future meetings, and afterwards to write and forward to him reports of them for the Society's use.

"The donations to the Society's Library have quite equalled the average of former years. The publications of societies, and other periodical publications on science Science Gossip, The Antiquary, The Midland Naturalist, the 'Scottish Naturalist,' and 'Geological Magazine' and 'British Rainfall,' 'Grevilles,' and the 'Journal of Conchology,' the two-last named having been added during the year. The Society continues to subscribe to the 'Geological Record,' the 'Journal of Botany,' the 'Entomologist,' and the 'Zoologist,' and to the publications of the Ray Society.

"An additional vote for binding to the amount of £6, has this year been made by the Council, and a number of valuable works on various branches of Natural History have been properly bound. Forty-five volumes have been bound during the year, and about thirty-five have been sent for binding. Owing to these considerable accessions and the increase in expenditure, and it is hoped that, by the members of the Public Library Committee, it will shortly be provided.

"A microscopic object cabinet has been purchased for Hertford, and sent to the stations thirty slides —twelve presented by Mr. R. T. Andrew, Mr. Mrs. Croft, and six by Mr. F. W. Phillips.

"The cabinet is now at Watford, and further donations will be gladly received and acknowledged.

"Since the 1879 Report a number of insurances for £50 was taken out, the property of the Society's specimens in the Watford Public Library has so considerably increased that it has been found advisable to increase the fire insurance to £150, and it is probable that amount, in the same office as before, now the Museum is open to the public, and specimens as well as the Society's library and surplus stock of Transactions.

"The financial condition of the Society continues to be satisfactory. A slight alteration has this year been made in the balance-sheet. In order to simplify the accounts, subscriptions overdue at the end of the year are included in the balance, instead of being carried to it as in former years. In addition to the balance of £30 3s., of which £20 is invested, the subscriptions paid in advance, the sum of £10 10s., and the subscriptions received for entrance fees in 1876 and 1877, has also been withdrawn from the Society's current account and placed on deposit with the London and County Bank. The whole of the amount representing the 26 life-members' fees is also invested in Consols or placed on deposit with a view to future investment. The arrears of subscriptions and entrance fees amount to £12 10s., which about £10 may be considered good. To this sum has been made in the balance-sheet. In order to simplify the accounts, subscriptions overdue at the end of the year in the name and constitution of the Society, be a letter removed by your Secretary in January, 1879, a number of members have taken a great interest in the Society suggested the formation of a branch in East Herts, the members of which might hold meetings at Hertford, Ware and other places, and also, in the possible event of a sufficient accession of members in the eastern part of the county, the election of some of the Society from the Watford to the Hertfordshire Natural History Society.

"To this scheme your Secretary at once gave his attention, and, the matter having favourably received by the Council, a revised code of rules was drawn up, and subsequently adopted at a special meeting of the Council held in June, when it was also decided that the new rules should date from the 1st of July. The Council requested the originator of the change to act as Honorary secretary for the East Herts, and in this capacity Mr. Croft has on that time most ably and successfully conducted the affairs of the Society in the eastern part of Hertfordshire.

"The immediate effect of this extension of the Society's scope has been, as already stated, a big increase in the number of members; and it is still very gratifying to be able to add that the number of workers in the various branches of natural history elected members have read, or promised to read, papers at the meetings in East Herts and Hertfordshire, and the Council hope that from the other members there will be able to fill or nearly fill the next session's programme.

"The hope that the Society might be a medium for bringing together the microscopists of East Herts, has not been falsified. At the opening meeting at the Shire Hall, Hertford, on the 2nd of October, several microscopes were in the room, and at the second meeting, held and favourable there was a remarkably good display of objects. The next meeting on the 6th of November was principally devoted to microscopical work, and with capital results, specimens of high powers, and one practical result of this was the discovery of errors in the demonstration of the instrument.

"For the success of these meetings in East Herts and the increase in the number of members of the Society is indebted to Lieutenant Croft, who has worked energetically in its interest, and amongst them may be specially mentioned Mr. R. T. Andrew, Mr. A. Cottam, and Mr. F. W. Phillips. There is one other member of the Society whose services have been of very great benefit. Your President has from the first taken a warm interest in, and entered heartily into the affairs of the Society, has been most assiduous in presiding at the meetings of the Society in Watford, and has added largely to the list of members. The Society has been most fortunate in having Dr. Gwyn Jeffreys as its President, and the name of its chairman from a scientific level to a country institution."

The Report and Balance Sheet were unanimously adopted.

THE NEXT ANNIVERSARY MEETING.

Lieutenant Croft announced that the next Anniversary Meeting would be held on the third Tuesday in January, 1881.

VOTE OF THANKS TO THE AUDITORS.

Mr. E. M. Cowell proposed :—"That the thanks of the Society be accorded to the Auditors, Mr. F. Litchfield and Mr. F. Silvester.

Mr. W. L. Smith seconded, and the resolution was carried unanimously.

ELECTION OF THE COUNCIL.

The Election of the Council then took place. Mr. A. Cottam and Mr. F. Litchfield acting as scrutineers. The following gentlemen were elected :—Dr. J. Gwyn Jeffreys, LL.D., F.R.S., F.L.S., Vice-Presidents, the Rev. Canon Bradly, M.A., F.L.S., F.G.S., Rev. Theodore Wood, M.A., Lieut. Cowper, K.G., John Evans, D.C.L., LL.D., F.R.S., F.S.A., F.G.S., John E. Littlebury, Richard A. Dyer, F.L.S., F.R.M.S., Rev. Thomas Wiltshire, M.A., F.G.S.; Honorary Secretaries, Richard Lydekker, B.A., F.G.S., F.E.M.S., John Hopkinson, F.L.S., F.G.S., F.M.S.; Treasurer, Benjamin Meadows, F.R.A.S.; Curator, W. Lepard Smith; other members, Professor John Attfield, Ph.D., F.R.S., F.C.S., Dr. Right Hon. the Lord Lytton, the Right Hon. the Earl of Essex, H. Fordham, F.G.S., James U. Harford, Sydney Humbert, J. Logan Lobley, F.G.S., F.R.G.S., the Rev. Rev. Herbert Poe, M.A., Joseph Pollard, Frank W. Silvester, F.M.S., and the Rev. R. Holden Webb, M.A.

Votes of thanks to the Auditors, Chairman, &c.

The thanks of the Society were accorded to Mr. B. R. Carew and the Rev. C. M. Perkins, retiring members of the Council.

THE HON. SECRETARIES.

Dr. Attfield then rose to propose a vote of thanks to the Hon. Secretaries, but before he did so he knew how much was done in any Society by the President, the Secretary, the Treasurer, and other officers; but all those who knew anything of the working of Societies knew that the chief labour fell on the Secretary. It was extremely important that the Secretary or Secretaries of a scientific Society should be men of science themselves, very important that they should be men of business, and that they should also be men of energy and of such personal qualifications as would be likely to attract gentlemen to the Society and induce them to become members. He fortunately had in this Society two gentlemen who were in all respects not only men of science, but

...ence of business, men of energy, and of personal ...ndidness. One of these gentlemen was present, ...d he must not say much of himself, but he was ...rtainly modest in reading the report, when he ...ve his own name, that the defect must be ...ne and he would see that the deficiency was ...pplied. He indebted for the success of ...e they were now assembled in the eastern part of Hertfordshire was ...ly owing to the energies, zeal, and ...ergetic spirit of Croft (applause), and at the time of the meeting for ...e formation of the society, and also at the ...ginning of last year as he had during all the ...me he had been connected with it, he found ...at Croft was ever ready to help forward the ...ause, when the report of the Council was ...ead, that would be considerable proportion of the ...ew members brought before the Society last year ...y Mr. Rose-Innes. Speaking of Croft's botanical ...ork he had been a brilliant illustration of his powers as a man ...d also as than the way in which the report had ...en brought before them that evening.

The resolution was seconded, and carried unanimously.

Professor Croft briefly returned thanks, and remarked that Mr. Hopkinson was not present to do so.

The President said that Mr. Croft's modest remarks had brought to mind of two lines in one of Bret Harte's poems—

"Praise to the face
Is open disgrace."

THE PRESIDENT'S ADDRESS.

The President then delivered the following address:—

The report of the Council for the past year, which has been read, shows that the Society is in a flourishing condition, not only as regards the number of members and the consequent addition to its income, but also in the enlarged public and the enrolment of new workers in the district, especially in local natural history and archæology. The extension of the area of which was owing to the suggestion of the Society, and the indefatigable exertions of our secretary, Mr. Rose-Innes, so as to include the whole of that part of the county, mainly caused by the increase in the number and more ready communication of the railways, of which we are so essential to the prosperity of the Society. We must take care not to be too ambitious in this respect, or (to use the expression) "overdo the grief" by going beyond our prescribed limits, or by spending our time in publications of less importance than those which form the rock some of the leading societies in the kingdom have lately struck. Many of the papers read or communications received during the year may be charged with preaching to the converted, and I take for the subject of this address my reasons for not preaching to the unconverted, viz., the hypothesis which is called the theory of Evolution, considered in a geological point of view.

In choosing this confessedly obscure and difficult subject, I must premise that I am not a geologist, and that I have not read a book of that one book—conchology. Nevertheless, the study of recent and fossil shells, which I have made my hobby during the leisure hours of my country, has led me to a conclusion adverse to that which Mr. Darwin and his followers have so ably and eloquently set forth as the origin of species by means of natural selection.

Before we see how our best lexicographer, Dr. Latham, defined the word 'evolution." He derived it from the Latin adjective *evolutus*, and gave five senses of it, the first is that which we refer to the present case. It is 'the act of unfolding,' and is exemplified by the unfolding of a scroll. Boyle, viz., "The progressive coagulation of the little saline bodies was resolved by almost innumerable *evolutions*, or divers and successive little bodies protruded to shoot into other those parts by which they might be best fastened together." The application to nature of the imaginative science of a great philosopher, who lived and flourished in the 17th century.

I can well understand another meaning of the word, which signifies the natural process of growth and development; and I am not prepared to say that the idea of transmutation, I do not think it is warranted by our present means of information.

The hypothesis of Evolution has been pounded by any of the ancient philosophers; not even by Plato. His *eidos* in the Parmenides does not seem to me to be more than the abstract idea or form of a thing or an idea. I have gone through the wonderfully laborious and erudite work of Lewtas, F.R.S., on the Greek Atomists, and agree with those of modern evolutionists. On the contrary he said in his second book that the first grand thinker who attempted to explain the universe based in the same way as they then did and would continue to do, and that there had been always the same law of progress and development, and that he inferred that the beginnings of all things (*cunctarum rerum primordia*) were widely differed and were varied by manifold changes, and that the first of all things is extremely suggestive, and occurs also in the second book, and is to the succession of life, which may be applied to the frequent and therefore set periods of sequence in fossiliferous formations. He contained in these lines:—

"*Avorsumat alia gentes, alia sinuuntur,*
Inque breri spatio mutantur secla animantum,
Et quasi cursores vitai lampada tradunt."

Which is a literal translation:—

Some kinds increase, others diminish,
And in a short time the races of animals are changed.

And, like runners, hand over the lamps of life.

The last line alludes to the competitive contest of the racecourses at the Athenian festivals in honour of Vulcan.)

It may be true that Lucretius was not a poet; but his speculations are as good as any since that are not based on geology.

In 1731 Dr. Erasmus Darwin, the grandfather of our justly celebrated naturalist, Charles Darwin, published his remarkable work, 'Zoonomia; or, the laws of organic life.' In this he anticipated the conclusion which his grandson has so ably developed and expounded. I will give some extracts from his chapter on generation.

"Every individual tree produces innumerable seeds, and every individual fish innumerable spawn, in such inconceivable abundance that if only a single one of these crowd the earth and ocean with inhabitants." Hence the struggle for existence.

"The idea of the production of all animals from simple living filament of their fathers, appears to have been shadowed forth or suggested in the curious account in sacred writ of the formation of Eve from a rib of Adam."

"From this account of reproduction, it appears that all animals have a similar origin, viz., from a single living filament; and that the difference of their forms and properties have been produced by different formities of the particles of the fluids by which it has been at first stimulated into activity; and that from the similarity of their origin, as well as in respect to the vegetable world, it is not impossible, but the great variety of species of animals, which now inhabit the earth, may have arisen from their own from the mixture of a few natural orders."

"Considering the great changes naturally produced in animals of the same species by the different food on the caterpillar, the frog from the tadpole, and even in mankind from youth to maturity; the great future improvements and additions which may be made to medicinal cultivation, as to horses, dogs, cattle, sheep, rabbits, or pigeons; as well as in domestication, which are constantly producing new and the great similarity of structure which obtains in all warm-blooded animals, including man, one is led to conclude that they have been alike produced from a similar living filament."

"From thus meditating on the great similarity of the structure of all warm-blooded animals, and of the same time of the great changes they undergo both before and after their nativity; and by considering in how minute a degree of time the great changes of animals above described have been produced, would it be too bold to imagine, that in the great length of time, which the earth has existed, perhaps millions of ages before the commencement of the history of mankind, would it be too great a work to suppose that warm-blooded animals have arisen from one living filament which the Great First Cause endued with animality, with the power of acquiring new parts, attended with new propensities, directed by irritations, sensations, volitions, and associations; and thus possessing the faculty of continuing to improve by its own inherent activity, and of delivering down those improvements by generation to its posterity, world without end."

"After treating of cold-blooded animals and plants in the same way, he adds:—

"Shall we then suppose that the vegetable living filament was originally different from that of each tribe of animals above described? And that the respective living filament of each of those tribes was different originally from the other? Or, as the earth and ocean were probably peopled with vegetable productions long before the existence of animals, and many families of these animals long before other families of them, shall we conjecture that one and the same fine filament of life, formed at first has been the cause of all organic life?"

Here Erasmus has lately published a critical essay on the writings of Erasmus Darwin, which thinks that he ought to be accredited as the real author of the doctrine of evolution in its modern form.

Lamarck's views are better known to naturalists. They culminated in his famous work, "Philosophie Zoologique," which was published in 1809. He believed in the mutation of species and species, but not in their extinction; and he conjectured (t. ii., p. 66, 69) that by means of direct or spontaneous generation the most simply organized animalcules were originally produced, "et que de ceux-ci sont successivement tous les autres animaux," that worms became insects; insects became crustaceans, annelids, and molluscs; molluscs became fishes; fishes became reptiles; reptiles became birds; and ultimately birds were transmuted into aquatic and terrestrial mammals. These strange theories were almost universally opposed by Cuvier, and may now be considered obsolete.

"Half a century later (1859) appeared 'The origin of species by means of natural selection.' It was the result of long and careful observation, and is written in the most readable English; unlike the work of the author's ancestor. I will now give some extracts, which relate to the subject before us, taken from the last edition of 1878.

"Page 469.—After mentioning the absence of fossils beneath the Cambrian formation, the author says, "That the geological record is imperfect all will admit; but that it is imperfect to the degree maintained by many, few will be inclined to admit. If we look to long enough intervals of time, geology plainly declares that species have all changed; and they have changed in the manner required by the theory, for they have changed slowly and in a graduated manner."

"P. 417.—The paragraph as to the imperfection of the geological record is too long to quote in its entirety, but it states that, 'The extinction of species, and of whole groups of species, which has played so conspicuous a part in the history of the organic world, almost inevitably follows from the action of natural selection, for old forms will be supplanted by new and improved forms. Neither single species nor groups of species reappear when the chain in the ordinary generation is once broken.' The remainder of this paragraph is considerably qualified by the use of such words as 'in some degree' and 'generally;' and it is therefore not open to any critical comment.

"P. 424.—'I believe that animals are descended from at most only four or five progenitors, and plants from an equal or lesser number. Analogy would lead me one step further, namely, to the belief that all animals and plants are descended from some one prototype.'

"The origin of species" is couched in a most attractive style and is full of philosophical speculation; but I venture to think that the hypothesis advanced or advocated by the author is inconclusive and unsatisfactory.

"I may here parenthetically observe that both the Darwins had been to a certain extent anticipated in the same theory of evolution by Buffon (Bellon) Hutton, naturalis Teredinis seu Xylophagi marini') a learned Scotch philosopher and geologist, and a Fellow of our Royal Society, disputed the common opinion which was entertained in his time by some neotaric writers that the living beings had descended from original forms or types.

"That part of Charles Darwin's work which proposes a *vera causa* to explain the modification by means of what he calls 'natural selection' does not seem to have met with general acceptance, even from Professor Huxley, who generally approves the doctrine of evolution. It is a very convenient *Deus ex machina* for solving all difficulties. Nor, when we admit a modification by natural selection, is that opinion shared by Mr. Wallace, who was the co-originator of the first-named and principal theory.

"What are the facts which Mr. Darwin can fasten us, with regard to the origin of species?

"Our knowledge of the earliest life-history of the world is entirely derived from the study of the fossilized remains of marine animals. It is unquestionable that the geological, or rather the palæontological, record is extremely imperfect. When we consider that more than three-fourths of the earth's surface is covered by the sea, and is therefore inaccessible to us, it is obvious that we must call the primeval formations, such as the 'fundamental gneiss' of Hutchison and the Laurentian rocks, have been subjected to the action of fire and again, to volcanic or metamorphic action, and have consequently been deprived of all traces of their organic contents. Then we only have to the short which our researches have enabled us to procure; and, until we have explored the whole earth, we have no right to endeavour to explain the '*ignotum per ignotius*. Let us examine the organic contents of these formations which appear to be the oldest in point of time.

"Having, as our present basis, the fact that the most ancient fossiliferous formations are to be met marine, it is useless to expect to discover in that formation the original horse or other land animal. Still we do find in these most ancient rocks species no less variety, nor a lower degree of organization than at present exists in the same classes and orders of the animal kingdom.

"In the Bohemian fossiliferous formation, called the Primordial Zone by that experienced palæontologist, M. Barrande, after investigating with our Cambrian rocks, he had found up to 1846 'twenty-six species of Trilobites, all of them belonging to genera or species, and no less than eight new genera' ('Lyell's Elements of Geology'). His epoch of this formation as occupying 'le même horizon que les formations Cambriennes et Siluriennes de la Suède, de Norvège, et des îles Britanniques.' At a later period, 1856, Barrande stated that he had in his museum 1,200 species of Invertebrata. Among these Cephalopods are the highest or most perfect forms of Molluscs, and allied to fishes. The Cephalopods which were provided with external shells, *e.g.*, Ammonites and Nautili, have left scarcely any surviving representatives, although they were abundant in the Palæozoic epoch, and comprised a very great number of orders, families, genera, and species.

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"All these different animals must have been originally constructed on the plan of those which existed partly of the kinds whose hard remains have been preserved, but mainly of other animals of a much softer and microscopic size, of which no trace exist.

"Another illustration, taken from the animal kingdom, has been brought to me. The Quarterly Journal of the Geological Society for last year contained a valuable paper by Mr. Jennings Hinde, on the burial area of the Lower Silurian, Silurian, and Devonian formations in Canada, and from then Lower Carboniferous in Scotland, in which these Foraminifera are described. These are classified from their resemblance to existing forms under seven genera, and included fifty-five different species. Here we have nearly a complete list of correspondence with present life in a group of the marine invertebrate fauna, which has hitherto received small attention. In fact, as far as we can go back in time, and examine the most ancient fossiliferous strata within our reach, we see the same diversity as now exists, instead of the simple and primeval forms. The Annulosa, to which Annelids belong, have a considerably advanced degree of organization.

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"The whole evidence supplied by fossil plants is thus opposed to the hypothesis of genetic evolution, and especially the sudden and simultaneous appearance of the most perfect forms in all parts of the earliest stages of the past history of the globe, and the entire absence among fossil plants of any forms intermediate between the great types of the flora."

"I will now venture to repeat my own published opinions on the subject.

"In the Introduction to my work on 'British Conchology,' I stated (page xxviii.), under the head of, '*Progressive development*,' that although I admitted that species are modified by positive evidence, that the organisation of many animal and vegetable types has not become more specialized beyond the more perfect state of development to which we ascribe their creation, and that, notwithstanding the enormous lapse of time which is represented in the accumulated fossiliferous strata, the modification or change which these types have undergone has been remarkably slight. There is no doubt considerable variation, but none of what is usually understood as 'progression.' (See Professor Huxley's Address delivered to the Geological Society, and published in Geological Society, 21st February, 1862.) The theory of 'progressive development' appears to have been very hastily adopted, and is by no means borne out by geological facts.

"After expressing my agreement with the opinion entertained by Professor Edward Forbes, that the true source of our Mollusean fauna was first manifested by the assemblage of Testacea preserved in the deposits of the Glacial period, and supporting the views of d'Orbigny, Arassiz, and others that there is no specific identity between any of the Tertiary and recent or existing Molluscs, I said (page lxxxix.),

"At all events, he must be a bold species-maker who can pretend to distinguish the specimens of the common Cardium Norvegicum, and of many other species, from those which now live in the adjacent seas; and their varieties and monstrosities also. There is a fossil and recent analogy, coinciding in the most minute particulars, the only difference being that the latter are glossy and comparatively transparent, while the former are dull and opaque. Even the *Lingula* of the Wenlock Shale-rock could not be distinguished by Mr. Davidson (who has especially and so thoroughly studied the fossil Brachiopoda) from a living species (*L. anatina*), by any character which he could recognise as constituting a valid specific difference.

"These considerations, however, involve the difficult question of the origin of species; and I will not pursue them further, except by suggesting the very great probability that *all* existing species have undergone slight modifications from time, geology plainly declares that species have all changed; and they have changed in the manner required by the theory, for they have changed slowly and in a graduated manner.'

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HALFPENNY STAMPS are preferred for payment of small advertisements in this paper.—Ed.

THROAT AFFECTIONS AND HOARSENESS.—All suffering from throat affections and shrunk and hoarseness will be agreeably surprised at the almost immediate relief afforded by the use of "Brown's Bronchial Troches." These famous "lozenges" are now sold by most respectable chemists in this country at 1s. 1½d. per box. People troubled with a "hacking cough," a "slight cold," or bronchial affections, cannot try them too soon, as similar troubles, if allowed to progress, result in serious Pulmonary and Asthmatic affections. See that the words "Brown's Bronchial Troches" are on the Government Stamp around each box.—Manufactured by JOHN I. BROWN & SONS Boston, United States. Depôt, 493, Oxford-street, London.