# The School Magazine

## McCABE COMMERCIAL SCHOOL

MAIDSTONE



Vol. 4. No. 10. December, 1933.

### CHOOSING A

## CAREER=

- in order to choose a career wisely it is necessary to have a wide knowledge of occupational requirements and also of one's own abilities and characteristics
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The

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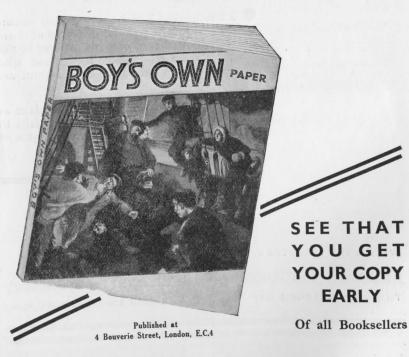
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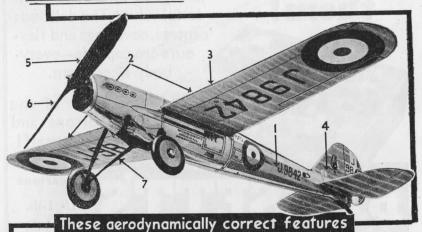


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More than two hundred schools have joined the Junior Book Club during the last year. As members, they realize the extreme importance of adding only the best of the new books as they are published, such as those recommended by the Selection Committee whose names include:—

Miss E. Strudwick High Mistress St. Paul's Girls' School.

Lady Baden-Powell Chief Guide.

Dr. C. A. Alington Head Master of Eton, 1917-1933.

Rev. H. R. L. Sheppard. Chairman.

#### **HOW IT WORKS**

Month by month, all new books (and good reprints) are most carefully read, many rejected and, after exhaustive search, four or five finally selected. The School Librarians see the list and decide for themselves which of the recommended books is most desirable from their point of view. Their choice is then posted direct to them at the ordinary price which they would pay in any shop. No extra charge is made by the Club in any shape or form. Obviously, this is the ideal way of picking books of lasting value.

#### PRIZES AND MAGAZINE.

Every member is entitled to enter, each month, for the competitions which are a regular feature of the Club's life. Handsome prizes are awarded to the winners, at least ten every month. Moreover, each member receives a free copy of YOUNG OPINION, the Junior Book Club's own magazine the price of which, to non-members, is sixpence. YOUNG OPINION gives reviews of scores of books, is fully illustrated, and contains a large number of articles all written by Club Members. Further particulars of this unique and valuable scheme may be obtained from the Secretary,

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15 Lower Grosvenor Place London S.W.1

## McCABE COMMERCIAL SCHOOL MAGAZINE

Vol. 4. No. 10.

December, 1933.

#### SCHOOL HISTORY.

The School Calendar is as follows:—

Monday, 15th January.—Easter Term begins.

Wednesday, 24th January.—Old Boys' Dinner.

Tuesday, 30th January.—Old Boys' Annual General Meeting.

Tuesday, 27th February.—Old Boys' Meeting.

Monday, 5th March.—Half-term.

Tuesday, 27th March.—Old Boys' Meeting.

Thursday, 29th March to Tuesday, 3rd April.—Easter recess.

Saturday, 14th April.—Easter Term ends.

Wednesday, 2nd May.—Summer Term begins.

Wednesday, 1st August.—Summer Term ends.

We are pleased to welcome the following new boys into the School this term :—

No. 116.—A. V. A. Baker, Prep. (School).

No. 117.—A. E. Barham, Prep. (St. Augustine's).

No. 118.—J. Foord, Upper IV (School).

No. 119.—H. H. Mungham, Lower III (School).

No. 120.—I. A. P. Newman, Upper IV (St. Augustine's).

No. 121.—G. C. Philpott, Prep. (St. Peter's).

No. 122.—R. D. Sacrée, Lower IV (St. Peter's).

No. 123.—R. Sawyer, Prep. (St. Augustine's).

No. 124.—M. G. Froud, Upper III (St. Augustine's).

No. 125.—H. A. Berry, Lower IV (St. Peter's).

No. 126.—D. Brown, Upper VI (St. Augustine's).

No. 127.—P. Murdoch, Lower IV (St. Peter's).

This term R. W. H. Bodiam left after  $3\frac{1}{2}$  years in the School to take a post in Messrs. Epps and Sons' garage. G. H. Stone has gone into the sign-writing trade after three years in the School. T. H. Joyce has obtained a post in Messrs. Bunyard & Sons' office. A. Baxter after a useful and successful school career has entered the Mercantile Marine. A. S. Croucher, after  $5\frac{1}{2}$  years in the school has obtained a position with Messrs. Drake & Fletcher. As far as we know there is not one boy who has left school in the last three years out of employment. We wonder whether any other school in this locality of over 80 pupils holds a similar record!

J. Elbourn has passed his second class Intermediate Typewriting Examination. D. C. Potts and F. H. E. Vidler have obtained their Elementary Shorthand Certificates. E. C. Rowcroft has sat for his Army Entrance Examination and F. H. E. Vidler for his Civil Service Aircraft Examination. J. Elbourn has sat for his Senior College of Preceptors' Certificate, while H. Hogg, J. H. Piper, G. H. Goodchild, E. Shaw and K. H. Whibley have entered for the College of Preceptors' Preliminary Certificate. We trust that all these boys will be successful when the results are announced in due course.

The sale of poppies on Armistice Day realised 18s. Id. The School attended a short service at St. Peter's and a wreath, provided by the Old Boys' Association, was placed on the War Memorial.

The hospital box contained 2s. 2d. when last opened and the R.S.P.C.A., 5s. 1d. About 16 lbs. of tin-foil has been collected this term. This has been handed to Kousin Mac, of the "Kent Messenger."

On two occasions this term the boys who have not been engaged in house matches have been taken by Mr. Bettle for a school walk. The "hikes" have been greatly enjoyed and prove a useful and healthy substitute for the boys who do not play football.

The growth of the School has made it imperative to increase the accommodation. With the exception of the rooms occupied by the caretaker, the whole of the premises at 8 London Road are now devoted to school purposes. There is room now for another 25 pupils, as well as a room which can be used by the upper boys as a private study and reference library. Another room has been reserved for music. Mr. Piper is now residing at 343 Loose Road. In consequence of these changes the "Interview Hour" has been changed to Thursday afternoons at London Road, and Thursday evenings at Loose Road during term time.

The premises at Loose Road are very commodious and include a large plot of land. In the past there have been several enquiries whether girls can be admitted to this School. We have pleasure in announcing that arrangements have been completed for the opening of a new school at Loose Road early in the New Year for boys and girls between the ages of 5 and 10. The new School will be run on up-to-date lines and will be known as "Mount Pleasant School," under the entire charge of Mrs. F. A. Piper, M.R.S.T., who has had varied and

very successful experience under the L.C.C., being assistant Headmistress of one of the largest London Central Schools. The new School will work in co-operation with the McCabe Commercial School and the Girls' High School, and should form a valuable adjunct to Maidstone Independent Schools. A good nucleus of pupils has already been enrolled and we wish the new venture every success.

A party of 60 boys attended the Palace Theatre to see Capt. Knight's R.S.P.C.A. Film dealing with Wild Bird Life.

The beginning and end of each term will be marked by a half-hour service and address at St. Peter's Church. This service is held in conjunction with other Maidstone Independent Schools.

A Junior Branch of the League of Nations Union is in course of formation. Over 50 boys have already enrolled. In this connection we had a visit from the Rev. Moyle on Tuesday, 12th December, who gave an excellent address on the subject of "Patriotism."

This term the librarian, J. Elbourn, reports that the following boys have presented books to the Library:—R. J. Randall, C. Jessup, Mr. Williams, P. Sacrée, R. Brett, R. Westbrook, D. Black, and J. Elbourn. All volumes which were becoming worn out were sent to the hospital.

In conclusion, we wish all our readers a very Happy Christmas and a Most Prosperous New Year.

#### UPPER SCHOOL NOTES.

Economic and modern history have had to make way for the more usual examination subjects this term, but will be incorporated in next term's syllabus. Meanwhile we wish all our candidates success.

H. Hogg has been a very hard working football captain, and we take this opportunity to register our thanks. The general standard of play has greatly improved; but boys must turn up regularly for practice at the School Ground at Aylesford.

Chess has also been rather neglected this term, but a House Tournament will be arranged next.

The chief feature of the term—Hard Work.

#### HOUSE AND FOOTBALL NOTES.

The usual notes from each Captain have been unavoidably held over until Easter. School and St. Augustine's drew at football 4—4, and School beat St. Peter's 3—0. J. Elbourn is now Captain of St. Peter's in succession to R. Bodiam, with G. Goodchild as Vice-Captain. A Baxter's place as Captain of St. Augustine's is now filled by H. Hogg with J. Pierce as Vice-Captain. D. Potts and F. Vidler are Captain and Vice-Captain of School House. The final points for 1933 will appear in the Easter magazine, together with the list of school football matches for the season.

#### DEBATES.

Two very successful debates have been organised this term, the first motion that "Man has Descended from Apes," being carried by 25 votes to 23. The chief arguments for the motion concerned the similarity of the skulls of the ape and that of the human being. Certain points regarding the structure of the spine and physical features of the ape and man were discussed. The opposition stated that there were two very large gaps in the evolution of animal life and it is impossible to say what changes may have taken place. Reference also was made to the fixed thumb joint of the ape. One of our humorists suggested that it might be necessary to produce certain boys to prove similarity of physical features of the ape and human being, but the mover of the resolution politely replied that it was quite unnecessary!

The second motion that "Chemical and Modern Methods of Warfare will speedily tend to the Destruction of Civilization" was carried by 33 votes to 3. The major arguments in this debate showed that the tremendous advance of science was being applied for the destruction of humanity, instead of its advance. Certain statistics were given regarding poison gas, wireless, flying machines, and other deadly weapons of modern warfare. Descriptions were given depicting the state of affairs for the civilian population, showing the helplessness and terrible dangers to which they would be exposed. The chief argument for the opposition was that the amount of armaments are so great that the countries would be afraid to go to war because of the devastating effect on the victor as well as the vanquished. These debates proved of great interest and others are being arranged for the near future.

F. Vidler.



#### THE MIND BEHIND THE SWITCH.

#### ELECTRICAL ENGINEERING AS A CAREER.

Most of us have seen or heard electricity in action. We have pressed knobs on our friends' front doors and heard ringing sounds coming from within; we have pressed knobs on our wireless sets and heard music being played in all parts of the world; we have turned on the electric light in our sitting-rooms—just in time to prevent father treading on the cat!

It is all so very easy. A train or tram conveys us from London to Leeds with very little tax upon our own energies; a magneto sends tiny sparks to ignite the petrol vapour in our cars, in response to a restrained push of the self-starter.

Electricity certainly does work had. Mother thinks so, too. Watch her gently pushing the carpet sweeper: cast your eye over the iron that is heated so obligingly when mother connects it up with the electric lighting system. No fuss; no dirt; no answering back. Just a faithful, dependable servant quietly doing the world's work.

But "pressing the knobs" is only the last part of the story. There are knobs on that old oak tree at the end of the garden. But if you pressed them all day and all night it wouldn't help mother to clean her carpet or do her ironing. And you certainly would not get any music!

#### On Being a Somebody.

No, somebody has got to link up those knobs with a great storehouse of energy many miles away; and somebody has got to create that energy for transmission to the many points where it may perform some useful service.

That SOMEBODY is the electrical engineer.

Civilization is gradually harnessing natural forces to the service of man. Electricity is the most useful of these forces. It is flexible, cheaply produced, easily transmitted. There is hardly a factory where it is not in hourly use; it provides the farmer with power for his threshing machine, and fixes atmospheric nitrogen to enrich his soil; it is providing more

So you see that that electrical engineer is definitely a "somebody". And he will become more and more important as the years roll by. The reason for this is that the Electricity Act of 1926 set out to plan this country's supply of electricity so that a plentiful supply might be available to all at a low cost. It aimed at the reorganization of electricity supply on a national basis. The main features of the plan are that all electricity supplied is to be generated in certain capital large power stations carefully selected for their economy in operation, abundance of condensing water, proximity to load and possibility of future extensions. These stations were all to be inter-connected by a grid of transmission lines. By standardizing all the apparatus enormous economies were possible.

This grid system is now in operation over the greater part of the country. The power stations have been built, and you yourselves have seen the enormous iron masts bearing the current from the power plants to the remotest town and village. The importance of this grid system to the electrical engineer lies in the fact that it is helping a very large number of industrial and social organizations to turn to electricity for their power, and this should mean a steady demand over many years for technicians to build and operate the necessary plant.

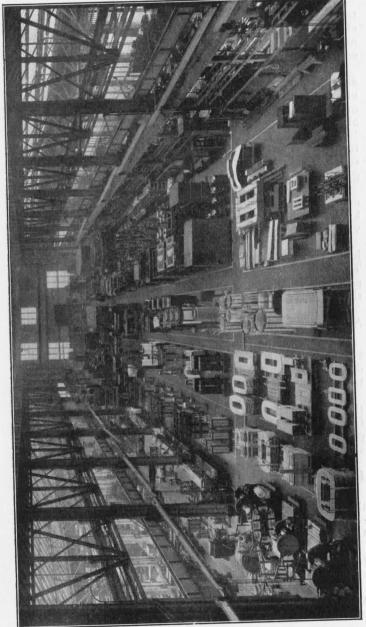
Besides this, science is finding more and more uses for this mighty form of energy. Moving pictures, talkies, wireless—the list steadily mounts up. The nineteenth century was the age of steam power. The twentieth is the age of electricity. It is for this reason that we feel electrical engineering should be carefully considered as a career for the boy with a flair for that type of work.

#### THE RANGE OF WORK.

There are five types of jobs available for the electrical engineer. He can concern himself with manufacturing, supply, communication, consulting, and teaching. Of these the most important, from the point of view of the number of persons employed, is manufacturing.

#### Manufacturing.

On this side of electrical engineering, the work consists of works' management, designing of plant, salesmanship, research and accountancy.



of Metropolitan-Vickers Main Transformer Shop.

Works' management consists of organizing and controlling industrial units interested in the production of electrical equipment. For such work a wide knowledge of manufacturing processes is essential and the ability to manage employees.

The designer must be something of an artist as well as an engineer, as he must be able clearly to visualize the ultimate form of his designs whilst engaged in the purely mathematical calculations on which they are based. He must

also be a sound mathematician.

Those engaged on the commercial side should have a wide technical knowledge combined with the ability to buy and sell. Here, personality is important, and also foreign languages, if the recruit contemplates going abroad.

The engineer taking up research must have a very "tidy" mind, and considerable curiosity. If this is backed by a sound knowledge of physics and mathematics, he should do good

work.

Salaries in manufacturing firms range from £200 for juniors to £700 for senior engineers in responsible posts. There are, of course, administrative and technical posts of particular importance that offer higher remuneration than this; but £700 is a fair average maximum figure.

#### Supply.

The work of the supply engineer under the new grid system will consist of operating the transmission lines, load distribution between various parts of the system, and general technical supervision.

He will be concerned with the electricity after it has left the power station. It will be his job, in the event of a new factory being erected, to link it up with the local source of power. It is interesting and responsible work, and the salaries are similar to those paid on the manufacturing side.

#### Wireless Engineering.

This is the most important of the categories coming under the general heading of "communication". Electrical communication is very largely in the hands of the Postmaster-General, who controls it on behalf of the government.

It covers inland and England to Europe telegraph and telephone services, ship-to-shore services, and radio-telephone

services to the main parts of the globe.

There are openings in the Post Office Engineering Department in London and the provinces for the technical control of telephone, telegraph, and wireless systems. Most, but not all, of the positions of Assistant Engineers and Inspectors to this organization are obtained by competitive examinations.

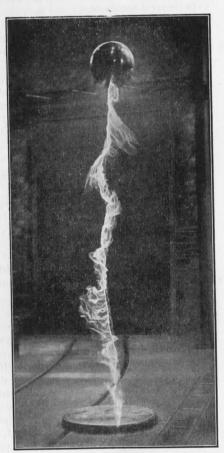
Salaries are as follows:-

Posts.	Age Limit.	Salary.
Post Office Engineers	20—25	£300—£900 or more.
Inspectors	17-23 $18-23$	£150—£600 £150—£600
Traffic Superintendents	10-25	2100 2000

Assistant telegraph engineers are also appointed from time to time in the service of the Colonial Office in Nigeria, the Malay States, etc., at salaries commencing at £480 a year.

Electrical engineers are also employed by the Imperial and International Com-Ltd. munications, (controlling Marconi and Eastern Telegraph Companies) at the Wireless Beam Stations at Bodmin, Bridgwater, Grimsby, Dorchester, and Cardiff. Also at Electra House, London, to which all communications should be addressed. Pay ranges from £200 to £800.

Electrical engineers are, of course, extensively employed in the various broadcasting stations. The salaries paid to assistant engineers are £300 or more, and to superintending engineers £500 upwards. Broadcasting also



One and a half million volts arc, 12 feet in length, produced in the High Voltage Laboratory at Trafford Park.

[Reproduced by the courtesy of Metropolitan Vickers, Ltd.]

offers opportunities on the manufacturing side. Engineers are required in the manufacture of appliances to generate wireless waves, the construction of wireless generating stations, the production of valves, and the building and designing of wireless receiving sets.

Research, too, is of increasing importance in the development of wireless. Research engineers are to be found at the universities, in factories for wireless appliances, and in the government service. Salaries range from £500—£700 for

experienced workers.

All work in connection with this form of communication is of a highly skilled character. Only those who have had a sound scientific training in electro-technics in a university or a good technological institution, and some experience in an electrical manufacturing works, are acceptable. This applies particularly to those specializing in the design and construction of wireless valves. The wireless valve is still the subject of much careful research. It is a promising field for the well-trained electrical engineer.

#### Consulting Engineers.

Unlike many other forms of engineering, there is little scope for private consulting work in electricity. Municipalities and large manufacturing organizations employ their own engineers, and are in a better position to advise on proposed schemes than the private consultant.

Salaries paid to the municipal electrical engineers vary with the size of the municipality and the range of the duties. They usually commence at about £400 and rise to £1,500, or less. There are also junior appointments, commencing at

£250 and rising to £800.

#### Training for Electrical Engineer.

Whatever profession a student wishes to adopt, he will find it invaluable to matriculate or obtain his higher school certificate before leaving school. Before a student is accepted at a technical college it is usual to demand some proof of a sound general education. The examinations mentioned are such a test, and it is obviously of enormous advantage to be able to get down to the task of acquiring technical knowledge as soon as the student leaves school, without having to concentrate on subjects that should have been covered during school years.

During school days it is wise for the embryonic electrical engineer to make a special study of mathematics and physics. A knowledge of German should also be acquired, if possible,

since much useful research work is being done in Germany at the present moment. It is always advisable to keep in touch with modern technical development in other countries.

After leaving school a decision must be made on the vexed question as to whether it would be better to acquire practical training in an engineering works first, and then, if funds are available, pass on to the technical college for the theoretical work; or to pass straight on to the college and take the practical work afterwards. Most authorities are now agreed that the student able to afford a technical training should pass straight on to the college from school.

Many engineers earning very high salaries started by going straight into engineering works, and omitted the "college" training. This should only be done nowadays, however, when no funds whatever are available and the student must begin to earn a living right away. In such an event the student should make a point of attending evening classes at one of the many cheap, but very efficient, Board of Education Technical schools or polytechnics.

For the boy fortunate enough to pass on to a technical college or university, there will be a three years' course culminating in a degree in engineering science. This course usually provides for sound initial training in the principles of mechanical and electrical engineering for the first two years of the course; the third year is spent in specializing on the particular branch chosen, e.g., communication.

On obtaining his degree it is generally recognized that two years' practical training is essential, and this is usually obtained in the manufacturing branch of the industry.

#### The Cost of Training.

There are at the present moment a number of free places, bursaries, scholarships, and exhibitions, making for a free passage from the primary school to the University. Particulars of these should be obtained from the local Education Officer.

For the student able to pass on to the technical college or university, the choice as to where to go will depend largely on geographical circumstances. Technical training can be obtained at the following colleges and universities:

City and Guilds (Engineering) College, South Kensington, King's College, University College and East London College (University of London), Universities of Oxford, Cambridge, Manchester, Leeds, Liverpool, Sheffield, Birmingham, and Bristol,

Armstrong College, Newcastle-on-Tyne,

Nottingham, Southampton, and Swansea University Colleges,

Edinburgh and Glasgow Universities,

Heriot-Watt College, Edinburgh,

Royal Technical College, Glasgow.

Bradford and Huddersfield Technical Colleges,

Loughborough College,

Leicester and Wigan Technical Colleges,

Battersea Polytechnic, etc.

For full-time day training, fees vary from £21 a year at the technical schools and polytechnics, to £45 at the colleges and universities. To this must be added approximately £10 for books and instruments and maintenance of the student during training.

#### The Youth Who is Wanted.

Early symptoms of an interest in wireless or other electrical devices is by no means a sure sign of aptitude to become an engineer. Most young people are interested in such things, but it is an interest that frequently fades with advancing years.

Much more important is the student's aptitude for, and interest in, the subjects that form the basis of engineering practice. Of these, a great deal of weight may be attached to mathematical ability and a natural aptitude for science, particularly physics, an independence of thought, a sense of responsibility and self-reliance, and, above all, a pleasing personality.

With such qualifications, the student may go forward with his work, confident that electrical engineering will provide for him a successful and useful career.

The state of the s

#### THE OLD BOYS' ASSOCIATION.

The usual activities of the Old Boys have taken place with, we believe, their usual success. The monthly meetings have been held, and the latter part of the evening devoted to lighter matters. The Association is particularly grateful to Mr. W. C. Beale for his able chairmanship and direction, Mr. K. Fowles for keeping the funds, Mr. T. George as Cricket Secretary, and Messrs. Solman and Williams for their duties as secretaries, to say nothing of the Social Committee presided over by Mr. Birchall. A very enjoyable social was held at the Central Café on 23rd November with about 72 people present. Meanwhile arrangements are going ahead for the Annual Dinner at the New Inn Hotel on 24th January. Tickets 4s., from the Secretary. It is expected to surpass last year's excellent figures. A splendid evening has been arranged so don't miss it! Early application desirable.

The Social Committee are also fixing a Carnival Dance some time in Feburary. The Annual Meeting of the Association will take place on Tuesday, 30th January. We shall have a successful year's activities to report.

An interesting letter has been received by Mr. W. C. Beale from J. Halls, an Old Boy who has now returned from the Far East.

#### LANGUAGES.

An individual with one language is like a violin with one string, both function but their range is limited. Occasionally we get letters from parents asking if it is necessary for their son to learn French, or possibly German. We have no hesitation in stating emphatically that for the boy or girl of average ability it is not only desirable but absolutely essential that one language at least should be studied other than the mother tongue. This opinion is based on a close scrutiny of modern conditions. In an over-burdened labour market, and with keen competition for the best positions, the scholar with the premier qualifications will be selected for the post. That qualification will be an examination of the Universities of London, Oxford and Cambridge, or of the College of Preceptors. One of the great advantages of the Independent School is its freedom to arrange a curriculum to suit the times; to introduce subjects which will equip the mind of the future citizen in matters of first-class importance. But where examinations are concerned we are governed by the Universities, and they rightly include languages prominently. In the fields of commerce, or the realms of professionalism, qualifications and languages are synonymous; and as modern conditions intensify, as the world is brought into closer relation by air-transport, by radio and by international co-operation, the value of

an additional language will increase. Modern methods of manufacture demand wide markets; we must seize our opportunities in the world; and as Sir Francis Goodenough has said, we have far too few linguists for our trade. Even apart from business reasons is the cultural importance of languages. Why be isolated from all the wealth of French literature, for example? Why be ignorant and embarrassed by the ordinary expressions in speech and writing which are essential to the intelligent man? We are not suggesting that our duty is to turn out social successes, but we must prepare our pupils to take their position in any phase of society to which they are called.

William the Silent.

#### BRIDGES MADE TO MEASURE.

Giant bridges take years to build, but cases sometimes arise where bridge-building must be done with the minimum of interference to traffic.

In such circumstances the engineers make the new bridge "to measure" and drop it into place in one quick job. Sunday is often chosen as being the quietest of all traffic days.

The London and North-Eastern Railway performed a feat such as this at East Lothian.

The new bridge had been built beside the old one running on bogies at a higher level than the old bridge. Explosive charges were fired and in a vast thunder of noise the worn out span vanished. The pieces left were quickly cleared away and was all ready.

Ingenious hauling appliances started to work and the 200-ton structure was slowly moved over to its new bed. Then 100-ton hydraulic jacks lowered it into place. So quickly were things done that 18 hours saw the job through.

In another rush job, the Southern Railway with 100 men demolished a Medway bridge near Rochester and erected a new one in 30 hours. They had two big cranes to help, and some of the masses of steel handled weighed 80 tons each.

Another bridge made to measure was put up over the Medway near Maidstone. It weighed 140 tons, but the job was done in 26 hours.

Nothing daunts our British engineers. In one instance they wheeled one bridge out of the way, and the new one into its place. L. Noakes.

#### PICTORIAL STATISTICS.

Mr. Williams was deputed to represent the School at a special meeting of educationalists at the College of Preceptors

in November when the celebrated Dr. Otto Neurath, the founder of the Vienna Mundaneum, lectured on his new methods of visual presentation of facts and statistics. Dr. Neurath has evolved a complete set of symbols, absolutely simple, but attractive, in fact not only a new method of presentation but a new international language. The chief character of " Pictorial Statistics" is its showing of essential and important details only. The time saved in the teaching of geography, economics, history, etc., is incalculable. Branches of the Institute have now been set up in New York, Moscow and Prague, and in addition it publishes books, and a bi-monthly periodical entitled "Bildstatistik" (Pictorial Statistics). It is hoped that we may be able to arrange for an exhibition to be held in Maidstone; and that some of the work of the Upper Boys may be based on the new method. On a talk after the meeting, Dr. Neurath informed Mr. Williams that he had great hopes of establishing a branch of the Institute in London.

#### INDUSTRIAL GEOGRAPHY.

On 16th October we visited the Maidstone and District Laundry in Loose Road.

As we walked through the doors we were greeted by the hum of machinery and our guide took us into the washing room. Here the clothes are put into revolving drums which whirl round and wash them. When they are finished they are put into centrifugal drying machines. These revolve at 1,400 revolutions per minute. After revolving for a quarter of an hour the clothes are almost dry. The process of drying is completed by passing the garments through hot air. The clothes are then ironed by large gas irons. Our guide took us round to the furnace room where he opened the furnace and showed us the inside. We were told that about 10 tons of coal were used in a week. The water used in the works is softened to about 3 degrees of hardness. Nearly 2,000,000 gallons of water are used in three months. The guide explained that every garment is classified according to the district it was collected from. Only one out of every 10,000 articles passing through the works is lost or damaged. E. Shaw.

#### Mary Variable

(Pulled by several contributors including J. Beale, E. C. Rowcroft and G. Goodchild.)

A Burmese footballer has kicked a ball, barefoot, a distance of  $166\frac{1}{2}$  feet.

Our right-hand nails grow faster than our left.

Mail-coaches on railways cost over £3,500 apiece.

A man breathes about twenty times a minute.

The Sahara desert is believed to consist of table-land and low-lying plains. It is interspersed with oases lower than the surrounding desert, some of them being of considerable extent and well-populated.

Glaciers are big enough to fill vast valleys and possess many of the properties of a liquid body. Like rivers they flow faster in the middle than at the bottom and sides. Ice-

bergs are merely floating pieces of a glacier.

The surface of the earth is roughly 197 million square

miles, only about a quarter being land.

A Word Picture: The sun had set below the hilltops, and the steep cliffs of the Beacons threw a dark shadow over the little camp snugly hidden in a shallow depression of the foothills. Beyond the shadow the valley, with its lake and winding stream, was still lit up with the last golden rays of sunset. A log fire burned cheerfully between the two tiny tents. Five or six boys in Scouts' dress were lying around in easy attitudes while the smallest of the party industriously dragged fresh fuel towards the blaze.

After correcting examination papers we learn that Solomon had 500 wives but his real homely wife was the Queen of

Sheba.

The Earl of Essex soon mustared his troops.

The man died as they did not open his pulse in time.

Homer is a kind of "pidgeon." Blood is composed of two kinds, red corkscrews and white corkscrews.

Loving Pa: "That's a good photo of my daughter. Has she paid for it yet?"

Photographer: "Not yet, sir!"

Loving Pa: "Oh, it's absolutely life-like."

How do you close the mouth of a river? With a lock and quay.

When a lion's hair falls out, it is generally his mane

trouble.

Where does Boxing Day come before Christmas Day?
In the dictionary.

#### IMPORTANT NOTICE.

This magazine is the official organ both of the School and the Old Boys' Association. The subscription is 2s. 6d. per annum. All Old Boys are urged to help support it and thereby keep in touch with the School and the Association. We appeal to those subscribers whose subscriptions have run out to renew their support as early as possible.

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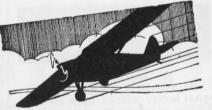
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