

No 6 July 1912

No 6

SOUTHGATE
 COUNTY SCHOOL
MAGAZINE

July 1912



A.G. Gouls.

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Southgate County School
Magazine.

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County : School : Magazine.

JULY, 1912.

No. 6.

SCHOOL NOTES.

In our last issue we ventured to hope for a larger yield of contributions during the summer term. It appears, however, that the influence of two important events, namely, the impending Matriculation Examinations and Sports Day, were overlooked. Certain members of the Upper School to whom we usually look for support have been applying themselves so assiduously (?) to preparation for the former, and the whole School has given so much attention to the latter, that the unfortunate Magazine has been somewhat in the background. Our readers must see to it that the Magazine is well supported. They are earnestly desired to write on any subject of interest either to themselves or to others.

The Cricket season has been most successful, and keen competition has been displayed in the House matches. Greater facility has been provided for net practice this year.

Since last summer considerable improvements have been made in the Open-air Baths at Wood Green. These, together with the new ones opened recently in the same neighbourhood, have been largely patronised by the boys.

Contrary to our hopes last term, we have not been able to make use of the Wood Green Swimming Baths for all the girls. But in spite of the fact that the Tottenham Baths are some distance from the School, several girls have attended them every Wednesday afternoon, while others have been to the Wood Green Baths on Thursday evenings.

Some members of the Club who could not swim at the beginning of the season have made considerable progress since their first visit this term. We hope this will encourage other girls, especially those of the Lower School, to join the Swimming Club next year.

The Tennis team has not been very successful in the matches which have been played so far this term. This is largely due to the fact that it has not been possible for the team to have much practice up to the present. We hope to have more time now that the Matriculation Examination is finished.

The members of the Tennis Club find that the high netting round the courts is a very great advantage, as much time used to be wasted in searching for balls which had disappeared over the fences.

The preliminary heats of the Annual Athletic Sports, arranged for the 13th of this month, were run off on Thursday and Friday, the 27th and 28th of June, and one or two semi-finals on the following Monday. Many entries were received, and great enthusiasm has been shown as usual with this event. Particulars of the Challenge Cups so kindly presented respectively by the Old Boys and by Mr. Geere, of Alderman's Hill, occur on a later page.

A few more unconsidered trifles have been turning up in the Laboratory lately: A "brunette" was put into a retort stand

and filled with soap solution. What are the S.P.C.C. about? After this, the tragedy of a "wrecked angle" in the Third Forms leaves us unmoved.

The aquarium on the girls' staircase has been a source of much interest to all sorts and conditions of passers-by. It is noticed elsewhere in the Magazine ; but we should like to express our admiration here for the splendid "frogger" made, by the kindness of Mr. Hunt, in the woodwork school.

We are glad to welcome R. C. Petty and E. R. Marsh among the Prefects this term. There are now thirteen Prefects, eight from the Upper Sixth and five from the Lower Sixth.

This year the prize which is to be competed for at the Sports for the best House among the girls is a Shield which has been provided by the Games Club.

A picture, which has been bought with subscriptions from the girls, will be offered for the Form winning the greatest number of points in the races.

The Mistresses have again kindly offered a picture for the House which is successful in the Team Race.

We must congratulate R. Burgess on having obtained a very good Civil Service Clerkship in connection with the Port of London. This berth was offered him on the results of an examination which he took while still in the School last autumn. We wish him all success in his new work.

The School closes for the Summer holidays on Wednesday, July 31st, and will re-open on Thursday, September 19th.

We are grieved to record the death of Kenneth Williams, which occurred just before we came back to School this term. Williams, who left us last Christmas, was only with us a short time, but he left many friends who had learnt to appreciate the

good nature which lay behind a quiet manner. Much sympathy was felt in the School for his parents and friends.

* * *

THE ATHLETIC SPORTS.

The Annual Athletic Sports were held on the School Ground on Saturday, 13th July, in the presence of a large number of parents, old pupils and their friends.

In spite of climatic conditions, the standard of sport compared very favourably with that of previous years, and the different events of the programme evoked their usual keenness and enthusiasm. The new events in the programme—The Long Jump (Girls), the Obstacle Race (Girls), the Old Girls' Race and the Hurdles (Boys) were well supported with entries and were keenly contested.

Special interest was centred this year in the winning of new trophies, viz. : The "Old Boys' " Challenge Cup ($\frac{1}{4}$ mile open) ; The "Broomfield" Challenge Cup (Old Boys' $\frac{1}{2}$ mile open) ; The "Geere" Challenge Cup ($\frac{1}{2}$ mile open) ; and the Challenge Shield (House [Girls] gaining the greatest number of points).

It was very gratifying to note the great support given by the old pupils of the School in the two events contested by them. The Old Girls' Race was won by Hester Campbell, and the Old Boys' $\frac{1}{2}$ -Mile by D. Wetton.

A very interesting feature of the afternoon was the highly instructive exhibition of flying given by members—Brown, Reed, Bartlett and Herring—of the School Aero Club. The model aeroplanes were constructed by the members themselves, and the highly satisfactory result of their study was greatly appreciated by the spectators.

At the conclusion of the day's programme the prizes were kindly presented to the successful competitors by Mrs. Gott, to whom a vote of thanks was passed by Mr. Warren, and carried in enthusiastic schoolboy fashion.

PRIZE LIST.

The "Vivian" Challenge Cup, presented to the House (Boys) gaining the greatest number of points.—Won by 'Whites' House.

The "Old Boys'" Challenge Cup, presented to the winner of the $\frac{1}{4}$ -mile open.—Won by L. Boswood.

The "Geere" Challenge Cup, presented to the winner of the $\frac{1}{2}$ -mile open.—Won by L. Boswood.

The "Broomfield" Challenge Cup, presented to the winner of the Old Boys' $\frac{1}{2}$ -mile.—Won by D. Wetton.

The Girls' Challenge Shield, presented to the House (Girls) winning the greatest number of points.—Won by 'Blues' House.

The "Victor Ludorum" Cup, presented to the boy winning the greatest number of points in the open events.—Won by L. Boswood.

A Picture, presented to the Form whose girls won the greatest number of points.—Won by VA Form.

A Picture, presented to the House winning the Team Race.—Won by 'Reds' House.

The Old Girls' Prize, presented to the winner of the Old Girls' Race.—Won by Hester Campbell.

A Special Prize, presented to the girl in the Upper School winning the greatest number of points.—Won by Dora Day.

A Special Prize, presented to the girl in the Lower School gaining the greatest number of points.—Won by Muriel Glyn-Jones.

A Special Prize, presented to the winner of the Hurdles.—Won by G. Wallace.

A Special Prize, presented to the boy (under 14) gaining the greatest number of points.—Won by F. Starling.

LIST OF WINNERS IN THE DAY'S EVENTS.

Tug-of-War.—First round: "Blues" beat "Blacks"; "Whites" beat "Reds." Final: "Blues" beat "Whites."

Long Jump (Girls).—Final: 1, Dora Day (12 ft. 9 ins.); 2, Dora Cogdale and May Brereton (12 ft. 5 ins.).

100 Yards (under 13).—Final: 1, L. Cole; 2, F. Starling; 3, C. Saul.

220 Yards Open.—Heat 1: 1, W. G. Makins; 2, L. Briggs; 3, L. Cole. Heat 2: 1, N. Day; 2, W. D. Makins; 3, J. Wield. Final: 1, W. D. Makins (time, 30 $\frac{3}{5}$ ths secs.); 2, N. Day; 3, W. G. Makins.

100 Yards (under 14).—Final: 1, F. Starling; 2, H. Barraclough; 3, W. Bolton.

Flat Race (Girls).—Finals: 1—1, Dora Day; 2, Dora Cogdale; 3, May Brereton. 2—1, Olga Müller; 2, Ethel Mortimer; 3, Winnifred Lawton. 3—1, Elsie Cogdale; 2, Connie Taylor; 3, Kathleen Gould. 4—1, Nellie Cannon; 2, Sissie Nix; 3, Elsie Brown. 5—1, Florrie Crump; 2, Doris Amor; 3, Sissie Volz. 6—1, Madeleine Boswood; 2, Ivy Brereton; 3, Muriel Glyn-Jones.

100 Yards (over 14).—Heat 1: 1, L. Boswood; 2, W. G. Makins; 3, L. Glover. Heat 2: 1, L. Briggs and N. Day; 3, P. Rumens. Final: 1, L. Boswood; 2, N. Day; 3, W. G. Makins.

Hurdles (100 Yards).—Heat 1: 1, W. Eder. Heat 2: 1, W. G. Makins. Heat 3: 1, G. Wallace. Heat 4: 1, J. Wield. Final: 1, G. Wallace (14 3-5ths secs.); 2, W. Eder; 3, W. G. Makins.

High Jump (Girls).—Final: 1, Dora Day (4 ft. 2 ins); 2, Kathleen Clark and Dora Cogdale.

Half-mile (Open).—Final: 1, L. Boswood (2 mins. 29¹ secs.); 2, W. G. Makins; 3, E. Hole.

100 Yards (Open).—Heat 1: 1, W. G. Makins. Heat 2: 1, N. Day; 2, G. Wallace; 3, L. Briggs. Final: 1, N. Day (11 secs.); 2, G. Wallace; 3, L. Briggs.

Circular Skipping (Girls).—Final: 1, Edith Joy, Connie Taylor and Hattie Gould.

Long Jump.—Final: 1, W. Eder (15 ft. 6 ins.); 2, F. Ward; 3, V. Donaldson.

Quarter-mile (Open).—Heat 1: 1, L. Boswood; 2, J. Cherry; 3, A. Evans. Heat 2: 1, W. G. Makins; 2, G. Wallace; 3, F. Ward. Final: 1, L. Boswood (1 min. 4 secs.); 2, G. Wallace; 3, A. Evans.

Team Race (Girls).—Final: Winning House, "Reds."

Team Race (Boys).—Final: 1, "Whites"; 2, "Reds"; 3, "Blues."

Obstacle Race (Girls).—Finals: 1—Winnifred Baxter; 1—Doris Hole; 1—Ruby Wills.

Old Girls' Race.—Final: 1, Hester Campbell; 2, Myrtle Campbell.

High Jump (Boys).—Final: 1, W. Eder (4 ft. 7 ins.); 2, V. Donaldson; 3, A. Dawson.

Old Boys' Half-mile.—Final: 1, D. Wetton (2 mins. 27 secs.); 2, P. Benda.

ANALYSIS OF POINTS (BOYS).

House.	100 yards, under 13.	100 yards, under 14.	Half Mile.	Long Jump.	Tug-of-War.	Team Race.	100 yards, over 14.	220 yards.	Hurdles.	100 yds., open.	High Jump.	Quarter Mile.	Total.
Reds	{ 3 1	{	{	{ .. 1	{	{ .. 2	{	{	{	{ 1 ..	{ 2 1	{ .. 1	} 12
Whites	{	{	{ 3 1	{ .. 3	{ .. 2	{ .. 3	{ 3 2	{ .. 2	{ 3 2	{ 3 2	{ .. 3	{ 3 2	} 37
Blacks	{	{ .. 2	{	{	{	{	{	{	{	{	{	{	} 2
Blues	{ .. 2	{ 3 1	{ .. 2	{ .. 2	{ .. 3	{ .. 1	{ .. 1	{ 3 1	{ .. 1	{	{	{	} 20

ANALYSIS OF POINTS (GIRLS).

House.	Long Jump.	Flat Race.	High Jump.	Circular Skipping.	Team Race.	Obstacle Race.	Total.
Whites	3	38	24	19		23	107
Greens	8	34	21	19		8	90
Reds	3	44	23	15		23	108
Blues	17	34	25	22		17	115

Whites beat Blue.
Reds " Green.
Reds " White.

FOOTBALL (1911-12).

The following caps were awarded during last Football season :—

*Brookes (captain), back (1910-11).

Hole (vice-captain), back.

Eder, goal.

*Souster, centre-half (1910-11).

*Dixon, right-half (1910-11).

Kingdon, left-half (half season).

Wallace, left-half (half season).

Friend, outside-left (half season).

Glover, outside-left (half season).

Dawson, inside-left.

*Boswood, centre-forward (1909-10-11).

Wilson, inside-right.

*Marsh, outside-right (1909-10-11).

* Signifies old cap.

HON. SEC.

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CRICKET NOTES.

So far we have had a most enjoyable, and a fairly successful, Cricket season. The weather has been somewhat against us, especially as it affected our net practice. One does not feel very keen to don flannels and do two or three hours at the nets on a bleak and showery afternoon. This lack of good practice probably accounts for one or two first innings disasters. Fancy, the first five batsmen of the first eleven being dismissed for four runs by quite simple bowling! That was in the match against Tottenham County School. Almost the same thing happened against Latymer. Of course we lost both games.

We had a very pleasant game against the Old Boys, albeit the ground was very soft. The School played boys and masters, but the Old Boys won, chiefly owing to Wetton's bowling.

We are looking forward with pleasant anticipation to the Parents' match. How eleven Boys do enjoy beating eleven Paters! And how amiable the latter are about it!

The second eleven have done very well this year. Up to date they have lost but one game. Their bowling is better than their batting, but experience is improving them in the latter department.

We have been playing on mats this year, and they have proved of inestimable value, as our wickets this year are new, and therefore not of the best. They will be very much better next season, as a supply of water has just been laid on, so we shall be able to set to work on them early in the season.

Hole and Marsh have creditably filled the positions of Captain and Vice-captain respectively. As a player Hole is a useful all-rounder; and Marsh has made vast progress as a batsman. They are both old colours, as are also Roberts and Boswood. These two are very useful in a School side, and it is a great pity that they are not more reliable. If they remain at the wickets for any considerable time the scorer has a very busy time. Boswood is a good bowler, but would be very much better if he would study length more carefully. Roberts is by far the best out-field the School has produced. Eder is another hitter, but not so good, indulging too much in that stroke that is between a "square leg" and a "cow-shot." Evans has done excellent work with the ball. He maintains a very tantalising length. Sliker is another bowler who has not had so many chances this year as he is likely to have later. Dawson plays a straight bat, but would be more useful if he put more power behind his shots. A very useful addition to the eleven is Ward iv. His wicket-keeping abilities developed very opportunely, and though he has not made many runs he bats nicely. Makins ii. did very excellent work on the hard wickets; on more than one occasion he played through the innings, but lately he has lost his form. Souster left at half-term. He was our best all-rounder. We shall hear of him anon.

LIST OF MATCHES.

- v. Tottenham County School. May 18th. Away.
School, 42 (Roberts 16, Makins ii. 8); Tottenham, 52.

- v. Wood Green County School. May 25th. Home.
School, 149 (Makins 53, Boswood 37); Wood Green, 91 and 39.
- v. Hornsey County School. June 1st. Away.
School, 77 (Eder 23, Makins ii. 14); Hornsey, 26 and 33.
- v. Old Boys of North London Schools. Whit-Monday. Home.
School, 162 for 6 wickets (Mr. Neely 101*, ?); Old Boys, 77.
- v. Old Boys. June 8th. Home.
School, 35 (Mr. Neely 13, Roberts 12); Old Boys, 65 Walker 16, Benda 12).
- v. Latymer School. June 15th. Home.
School, 22 and 50 for 4 (Souster 14, Glover 6); Latymer, 33 and 26 for 5.
- v. Enfield Grammar School. June 22nd. Home.
School, 57 and 48 for 5 (Eder 15, Glover and Danton 10); Enfield 26 and 39.
- v. Enfield Grammar School. June 29th. Away.
School, 56 and 59 (Marsh 22 and 21, Glover 21); Enfield, 53 and 43.

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TENNIS CLUB.

We were rather late in beginning play this season, as the new courts were not ready for use, and so the Tennis Team has not had very much practice. We hope to have more time for practice now that the Matriculation Examination, for which two members of the Team have been working, is finished.

The results of the matches which have already been played are given below :—

- May 20th—Hornsey County School. Lost 36—63 games.
- June 11th—Latymer County School. Unfinished.
- June 17th—Hornsey County School. Lost 45—54.
- July 6th—Tottenham County School. Lost 18—81.
- July 8th—Finchley County School. Lost 18—81.
- July 11th—Enfield County School. Lost 27—72.

DORIS K. VARLEY.

SWIMMING.

This term the swimming has been handicapped owing to the uncertainty of the weather, but nevertheless many boys go to the Wood Green open-air baths, where Mr. Annett has been teaching the learners, and where the swimmers practise for the annual Swimming Sports which take place at the end of the Summer Term.

On July 4th a Team of Girls from our School competed against three other schools at a gala at Tottenham. The team, consisting of Cissie Glyn Jones, Muriel Glyn Jones, Dora Cogdale, and Edith Joy, came in second, being beaten by the team from Tottenham High School by one half of a length.

I should like to suggest that those anxious to practise swimming in the winter months should go to the closed-in baths at Wood Green, where, by joining a club, they can obtain admittance at a reduced price. If this suggestion be followed out it would both benefit themselves and give the School a better chance of securing the Shield already won by us for the last two years.

A. THOMSON, VI c.

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SCHOOL AERO CLUB NOTES.

During the last term the Club has made excellent progress. The Club owes a debt of gratitude to its President, Mr. H. Paull, who has made it possible for the Club members to have the use of the School Workshops on Friday evenings.

A Duration Competition was held at the end of the Easter term. Several members were present, and a good display of model-flying was witnessed. The results were as follows :—

First—E. R. Brown, 69 seconds.

Second—E. R. Marsh, 45 seconds.

Third—F. Ellinghaus, 42 seconds.

Mr. Paull kindly officiated as timekeeper. Other good flights were made by Reed, Redottée, Petty, Herring and Bartlett.

On April 13th two of our members went over to Finchley to fly for the Palmers Green and District Aero Club in a Team Race

against the Aero Models Association; one member made a flight of 65 seconds, and, after a good afternoon's flying, the Palmers Green Club won.

On June 10th A. Bartlett was testing a new model at Bounds Green Road, when, after some preliminary "tuning-up," the model quickly climbed to a good altitude, and went speeding away over the housetops. It has not returned yet. Members are advised to put their names and addresses on models in the future.

Several Members have taken advantage of the Flying Meetings held every Saturday at Hendon to gain an insight into full-size aeroplanes.

The first member of the Club to experiment with model hydro-aeroplanes (aeroplanes which rise off the surface of the water instead of terra firma) was J. Reed. Cork floats were fitted to a model, but it did not succeed in rising from the water, probably owing to the fact that the floats were not of the correct section.

Redottée and Reed have embarked upon the construction of a full-size biplane glider. The fuselage and part of the framework of the planes are already finished. When the machine is completed it will only remain for a suitable gliding hill to be found for the constructors to try their hands at free flight.

The improvement in the workmanship and construction shown by the models of most of the members is very satisfactory, and it is gratifying to know that the Club has brought many into touch with the theories of mechanical flight who might otherwise have been ignorant of the elementary principle of the aeroplane.

The Club model records, at present, are :—

Distance—1,563 feet.

Duration—92 seconds.

[It should be noted that the British Official Record for Duration is 89 seconds, 3 seconds less than the Club's record.]

E. R. BROWN, Secretary.

* * *

CAMERA CLUB NOTES.

The Camera Club, though meetings are occasionally held in winter, is essentially a summer institution, and this term it has

been taken up with great interest by members throughout the School. Several new members have also been enrolled.

Two meetings have already been held this term, the first early in May, to arrange a programme for the season; the second a month later, to hold a review of work done. The next monthly meeting will be held in the second week in July.

Members are expected to give at least one photograph per month to the School album, which now contains some very interesting work of good quality. It is hoped that members will try to obtain an interesting souvenir of the Athletic Sports on July 13th, weather permitting, as Kilbey did last year. The weather has been ideal lately, and some work of high standard should result at the next meeting. Excursions will be arranged after the Examinations are over to places of interest in the county, and to such as will afford scope for the photographic genius of the party. Some will also be arranged for the holidays if possible.

We are very sorry to say that some of our most ardent photographers, Kilbey and Holloway, our quondam secretary, have left. The Club will well remember the interesting lecture Kilbey gave us last year on "Photography for Beginners."

The School Dark Room, which is an excellent one for such purposes, is at the disposal of members who do not care for the inconvenience in their own homes.

R. PETTY, Hon. Secretary.

* * *

OLD GIRLS' ASSOCIATION.

The first meeting of the Old Girls' Association was held at School on Saturday, June 1st. Eleven old girls came, and we all enjoyed seeing one another and the members of the Staff, who came to welcome us. We had tea out of doors, but the rain came on soon afterwards, and disappointed our hopes of Tennis:

However, we managed to spend a very pleasant hour in the Gymnasium, talking, and playing games, and were grateful to Hester Campbell, Muriel Ford, and Gladys Beal, who played, sang and recited to amuse us.

We hope to hold the annual meeting always on the first Saturday in June. All Old Girls will be welcome, but notices will not be sent to those who have not paid their subscription for the previous year. Subscriptions (1s. 6d.) for 1912 are payable now to the Secretary.

The Magazine is sent each term free to members of the Association.

MARGARET LACEY, Hon. Secretary.

* * *

THE OLD BOYS' CHALLENGE CUP.

We wish to express our sincere thanks to the members of the Old Boys' Association for presenting a Challenge Cup to the School. The presentation of this trophy has been greatly appreciated by the School, and the boys have keenly responded with their entries for the 13th July. The conditions of holding this Challenge Cup have been forwarded by the Hon. Sec. of the Old Boys' Association, and are as follows:—

- (a) Distance to be $\frac{1}{4}$ mile.
- (b) Race to be scratch.
- (c) Winner to hold the Cup from the day of the Sports till seven days preceding the Sports of the following year, when the Cup is to be returned to the Secretary of the Old Boys' Association.
- (d) The winner of the Cup on three occasions to become the owner.

Before the issue of this number of the School Magazine the above-mentioned Cup will have been won for the first time.

We wish also to thank Mr. H. Geere, Palmers Green, for giving a Challenge Cup for the $\frac{1}{2}$ mile open; and Mr. P. G. Edge for giving a Challenge Cup—the "Broomfield" Challenge Cup—for the Old Boys' mile open. The conditions governing the award of the "Geere" Challenge Cup are similar to those for the Old Boys' Challenge Cup mentioned above. Certain

conditions governing the award of the "Broomfield" Challenge Cup have not yet been agreed upon.

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OBITUARY—"RURAL SOUTHGATE."

Sic transit gloria Monday (1st July, 1912).
"Rus in urbe, perambulata et mota omnibus."

* * *

AT HENDON.

We arrive at Hendon to see a great crowd of motors, cycles, people, and yelling programme vendors. We may, if we are not simply rolling in wealth, gain admission at half-price. This is effected by buying a copy of the current week's "Aeroplane," a coupon from which entitles us to half-prices.

When we gain entrance to the Aerodrome we walk along a path to our enclosure. On the right-hand side of the path we see the hangars, with the aeroplanes' bows protruding from them as if they were Royal steeds "ryghte eagere towards ye Tourney." After we have traversed half the path we come upon a band of two or more musicians (?). These gentlemen plant themselves as a rule on a spot calculated to be the busiest on the path, and our friends proved to be no exception. When, with a little gentle persuasion, we at length manage to overcome this difficulty we find ourselves in the enclosure.

If we are very quick-sighted and of meagre proportions we may manage to capture a small vacant space at the railings bordering the Aerodrome. Arrived here, we see in the distance, between the red and white starting posts, a group of brown- or blue-clad mechanics. After a short space of time we see a cloud of blue smoke emerge from them, floating on the breeze. There are cries of "There's one starting!" "It's Graham White!" "Hamel!" "Turner!" (or any other name the speaker has

heard or read of). The mechanics spring away, and a form like a huge dragon fly, or, if it is a biplane, a huge box-kite, runs hopping over the bumps, and gradually, ever so gradually, it rises; then, when it has flown not more than ten yards, the engine stops and the machine comes to the ground. (General groans and "aw...s" mingle with the weary cry of "chawkloites.") This, however, is immediately recognised by the experienced spectator as preliminary to the real flight.

In a short time a multi-coloured form—which after a slight attack of colour-blindness we recognise as a Boy Scout—steps forth. Great and mighty is he, and especially so when he gets at the business end of a megaphone, of similar dimensions to himself, and magnifies his microscopical vocal powers until the audience can just hear scraps of sentences, which, pieced together, give the information that Mr. Hamel is about to make an ascent. The crowd becomes very eager, as the thrills and skill of that great aviator are by no means unknown. His mechanics run his machine out, and the man behind, holding up the tail, appears to be a veritable Atlas, so great does the rear end of the monoplane seem in comparison with him.

The engine is started, and with a hum which becomes a roar the machine moves. It rises almost instantly—Mr. Hamel is known for his wonderful speed in rising—and the aeroplane begins its ascent, which is made in a huge spiral until the aeroplane appears no greater than a huge bird high up in the sky. The pilot now guides the machine downwards, and does so at an angle calculated to raise one's hair. When about one hundred feet up he accomplishes a magnificent vol-plané which is as graceful as the flight of a swallow. He meets the ground as lightly as a feather, amid a roar of applause from the spectators. Mr. Graham White, or perhaps Messrs. Turner, Ewen or Valentine will now make some flights.

Meanwhile the clock has not been stationary (a sometimes inconvenient practice it indulges in during school hours); therefore we have to try to grasp the fact that it is tea-time. This is not very difficult, as we are beginning to feel rather unsteady; therefore we lose no time in regaining home, sweet home and tea.

T. M. TOD, Form IV. D.

THE AQUARIUM.

Our Aquarium began with a few small tadpoles and some frogs' spawn in a small jar. Then we got some newts in another jar, and also some sticklebacks, and now we have two goldfish and some water-snails as well.

When the sticklebacks came they were put in beside the tadpoles; but when we looked at them we saw the tadpoles were hiding, and not one of them had the whole of his tail left on! The sticklebacks kept making darts at them and taking out large bites. We soon saw that the tadpoles were not at all happy, so they were taken out and put in a case by themselves, where they are much happier.

The sticklebacks, tadpoles, newts and goldfish eat ants' eggs, and sometimes some meat is put in, and they all try to get the same piece. The sticklebacks are very warlike fish. They have spines sticking up along their backs. They have three spines just by their head, and a number quite close to their tail. There are also four spines, quite wide apart, underneath the body. When a stickleback fights he gets underneath his enemy and kills him by sticking these spines into him.

The newts have laid a great many eggs. When the mother newt lays an egg she wraps it up in a leaf, and places it so that the water can pass through to keep it fresh. Then she leaves it to hatch itself. We can see the little baby newts forming inside the little round ball of jelly which is the egg. Some of the newts have got free now and are swimming about.

We watched the back legs of the tadpoles growing, and then their front ones. Some of the tadpoles we had first are frogs now, and are jumping about in the grass in the large case.

The water snails and the green plants which are in the large tank help to keep the water fresh.

GLADYS SANDERS & FLORENCE TOD, Form IIA.

* * *

"IN THE REALMS OF SPACE."

From earliest times the aspect of the heavens on a clear night has never failed to stir mankind to feelings of wonder and

admiration. The ancients, much as they tried to read the secret of the stars, could only make random guesses as to their real nature, and, until several thousand years had passed by, the mysteries of the firmament remained unsolved.

The telescope in those days was a thing unknown, but to-day it has been brought to such perfection that we are enabled to search the depths of space and reveal sights, invisible to the naked eye, which would have astonished the star-gazer of old. What would he have thought indeed if told that all the fixed stars were suns like ours, many of them larger than the one around which our humble planet circles? Yet modern science, with the help of the finest instruments, has proved beyond doubt that such is the case. The distance, too, of many of these blazing suns has been measured and verified by repeated observation, with the result that the nearest of them, a star in the Southern Hemisphere, has been found to be roughly twenty-five millions of millions of miles from the earth. Such a distance is certainly beyond conception, but is a fact all the same, and one must be prepared, in the study of the starry universe, to meet with everything on a grand and mighty scale.

To obtain a better idea of what a star really is one could not do better than examine, first of all, the sun, which sends to us so plentiful a supply of energy in the form of light and heat across nearly ninety-three million miles of space. It is this energy which was stored chemically by the trees and plants growing in the huge jungles which covered the earth many ages back. The same energy re-appears to-day in the form of heat when we burn the coal produced by the decay of all this vegetation. We know that heat and light rays consist of very minute waves travelling at an almost incredible speed. Now it is obviously impossible for waves of any kind to be produced in absolute emptiness, and so there must exist throughout all space something by which the rays from the sun and the stars are enabled to reach the earth. It appears, therefore, that the energy of light and heat rays is due to the vibrations set up in this medium, which has been called the ether. Very little is known about it as yet, for although it is all around us, and even in us, we cannot perceive its presence. It is this same "ether" in which the waves of wireless telegraphy travel, and, indeed, it seems to be intimately bound up with all the phenomena of electricity and magnetism.

So we see the vast importance to human life of the mysterious and elusive ether.

To the great controller of the Solar System we can give but a very brief survey. This stupendous mass which appears in our skies as a small disc of fierce white light, is in reality, of such dimensions that if the earth were represented by a globe three inches in diameter, the sun on the same scale would be represented by a globe of diameter twenty-six feet. An express train travelling at the rate of sixty miles an hour not stopping once would, if a railway could be laid round the earth at the Equator, travel right round in a fortnight. A journey round the sun's equator at the same rate would last about five years. The actual diameter of the sun is about eight hundred and sixty thousand miles, over a hundred times that of the earth. Although the sun's size is of a very imposing character, it is, on more closely examining his structure, that we realise more than ever his fitness to sway the family of eight planets (one of which is the earth) which circle around him in space.

For nearly three hundred years past the sun has been subjected to an almost ceaseless examination with powerful telescopes suitably equipped to protect the eyes from so dazzling a blaze. One of the first discoveries which resulted from this study was that of sun-spots. These are patches on the surface of the sun which appear almost black in contrast with the surrounding brightness. Later, it was discovered that they were rents in the sun's surface, some of them being of such width that a dozen worlds like ours placed side by side would not stretch across the gap. Many theories were advanced to explain the presence of these spots, but to-day it is definitely known that they are due to terrific storms of a magnetic nature in the sun. These storms are sometimes of such intensity as to affect magnetic instruments on the earth to a considerable extent.

One of the greatest triumphs of astronomical research is the successful application of the spectrometer to the study of the sun's composition. The spectrometer is an instrument by which the light received from any source, can be analysed and examined. The light emitted thus indicates what substances are present in the source of the light, for most metals when converted into vapour by excessively high temperature send out rays of definite colour. Gases, too, at a high temperature emit coloured light. Now the

appearance of sunlight when examined by the spectrometer shows that such metals as iron, copper, zinc, lead, sodium, potassium, calcium, and many others which occur on the earth, exist also in large quantities in the sun. Among the gases, oxygen, and an immense quantity of hydrogen, have also been detected. The fact that the presence of such metals as iron and copper can be shown by spectrum analysis, proves that these metals are in the condition of vapour at the surface of the sun. That is, that the sun's heat is so tremendous as not only to melt these metals but to vaporise, or boil them, and keep the vapour suspended above the surface in the form of metallic clouds, which, if the temperature fell sufficiently might form metallic showers.

A very interesting feature of the sun is the atmosphere, a zone of rose-coloured light projecting from the surface. This appendage, which is very faint compared with the dazzling whiteness of the sun's globe, often shoots out huge flames of burning gas to a tremendous height. These sometimes assume very fantastic shapes, and have been known to have been hurled upwards with a velocity of 160 miles per second. In the year 1871 a quantity of glowing gas was one day observed to rise to a height of 54,000 miles from the surface of the sun. In less than twenty-five minutes the whole mass was blown to fragments and tossed to a height of 200,000 miles, while after another thirty-five minutes it collapsed to its original height. If these eruptions represent the state of tumult on the surface, what the interior can be like is past imagination.

Travelling outward from the sun we pass the eight primary planets sweeping majestically along their orbits. First of all we see the little planet Mercury completing his journey round the sun in eighty-eight days. Venus comes next, the planet which adorns the sunset for part of the year, and for the remainder of the year appears only before sunrise owing to its revolution round the sun. Thus it is that this world, which is very similar in size to ours, has been called the "morning" and "evening" star. The Earth, with its load of life, pursues a still wider orbit at a distance of nearly ninety-three million miles from the sun.

Then comes the much-talked-of Mars, a fascinating telescopic study, with its snow-capped poles, its reddish-brown continents, and bluish-green seas. With an instrument of high power one can perceive the famous channels which stretch in perfectly

straight lines, in some cases, across whole continents. Some have supposed them to be the work of intelligent beings. That, however, is a matter for speculation, since nothing definite can be ascertained as yet on the subject. Since the channels disappear during the winter season on Mars and re-appear the following spring, it has been suggested that the intelligence would be questionable of beings who dig canals, and then fill them up for the pleasure of digging them again the following season.

We next pass Jupiter, the largest planet of the Solar System. This gigantic globe has a diameter of eighty-five thousand miles, and seems to be perpetually wreathed in huge cloud banks of steam and other vapours driven off by great internal heat. These clouds are formed roughly into belts by the rapidity of the planet's rotation, and it would seem that the whole mass beneath them is in a red hot, molten condition. Indeed, it is highly probable that we see Jupiter to-day in much the same state as the earth was countless ages ago.

The planet Saturn, with its enormous rings composed of numberless little moons, is in a similar condition to Jupiter, but is not so large. The same may be said of the remote planets Uranus and Neptune. These two have been very appropriately called the Arctic Planets, for the amount of light and heat received by these two dreary isolated worlds, owing to their enormous distance from the sun, must be exceedingly small.

Between the orbit of Neptune and the nearest star lies a veritable gulf of space filled only with the universal ether, a gulf measured not in millions of miles, but in millions of millions. Yet, the spectrometer shows us that the substances in many of the remote stars are the same as those on earth. In Sirius, the brilliant "Dog Star," for instance, there are the common metals—iron, magnesium, and sodium—besides huge quantities of the gas hydrogen.

That the stars themselves move in definite directions has been proved in several ways, and the rate of motion has, in some cases, actually been measured. Owing to their enormous distance, however, this movement cannot be detected by the naked eye. The stars then, which appear to our limited vision as points of light scattered over the firmament, are, in reality, huge suns whirling through space, each possessing, in all probability, a system of worlds which it carries along with it. Through the

telescope misty patches of light are often seen surrounding perhaps a few isolated stars or a star cluster. These are the nebulae—stupendous masses of glowing gas which cling round suns in the process of formation.

Count the number of stars seen by the naked eye in a chosen part of the sky. Then examine the same portion through a field-glass. The number is increased tenfold, while it would be almost impossible to count the stars revealed by the powerful telescope and the photographic plate. We see that space must indeed be boundless to contain the mighty host, and the imagination reels at the sight of universe after universe of suns extending into infinity.

NORMAN DAY, VI A.

* * *

THE AUTOBIOGRAPHY OF A TADPOLE IN THE AQUARIUM.

What a miserable day it was, that day when I was separated for ever—as I thought—from my beloved comrades of the dear old pond. We were all enjoying ourselves most heartily, when suddenly we heard a joyful shout above. We spent the next few minutes in fleeing for our lives, for we were trying to evade some enormous obstacles which were thrust into our peaceful domain. These things—which I have since learnt are commonly called fingers—were not to be denied, and oh! I shall never forget it, I was suddenly squeezed so tightly in between them, I made sure that I should be squeezed to death. It was then that I thought I had seen the last of my home and friends.

I was taken rapidly out of the water, with a victorious shout of triumph from my detestable vanquisher, and then dropped into a tin. Fortunately I was not in this awful prison for very long, but soon I was thrown into some more water in which were some plants and grasses. I naturally thought this was the pond again, and I made another desperate effort to escape, and swam with all the strength I could summon up, when I struck my poor nose with great force against something. I could not see it, so I turned—mad with rage—and swam in

another direction, but only to be again repelled by this awful invisible something.

During this period, which seemed an unending age, I thought of nothing but making my escape. After I found that I was doomed, I thought I might as well make the best of my fate, and I began to consider my surroundings. One thing I soon discovered which tended to comfort my wounded feelings a little, and that was that there was plenty to eat. I was exploring round the various plants and rocks when I received another shock, but this time of joy, for I saw, advancing rapidly towards me, my own brother, who had shared the same fate as myself. "After all, then," I thought, "I shall have a companion in adversity, so surely life will not be so absolutely intolerable and hateful."

It was soon evident, however, that my brother was not to be my sole companion. I learnt from him that there had been an awful invasion in our old home, and that many "tads" had been taken prisoners. These were soon admitted into our new abode, to which I was gradually getting reconciled. To these dear friends I did not object; but you may imagine my surprise and disgust—enough of which I cannot express—when several of the fiery and proud members of that detestable Stickleback family made their appearance in our midst. Their manners were sufficiently objectionable to bear as they used to pass us rudely by when they inhabited the next road to us; but when they were put into our—I don't know what you call it, so I will say—residence with the sides we cannot see, but against which we are always knocking our noses, they were even more contemptible. The other tadpoles and I thought that perhaps they might have been a little humiliated after their capture, but it was just the reverse. Seeing that they decided to behave so rudely and "unfishlike," we also determined to turn up our tails at them whenever we met them.

Nor were these sticklebacks the only intruders in our now rather happy demesne. One day we were being watched by many people—rather more than usual, I thought—when all of a sudden something darted furiously into the water. It was so dazzling that at first I thought it must be a "sun-bolt." Not one of us dared to open his eyes for the moment—including the haughty sticklebacks—but after we had recovered slightly from our shock, what a sight met our eyes as we tried to

see what had happened! It was not what I had at first expected. There, swimming about, as naturally as any other member of the "natural order of Fishylariaceae," were two or three huge monsters. They were, indeed, very beautiful to gaze upon, but I dared not trust myself face to face with one of them, in case he should swallow me up, for all their mouths seemed to be such enormous cavities. This feeling of fear, however, soon disappeared, and I gained sufficient confidence in myself to study somewhat closely the manners of these princely fishes. I quickly perceived that the sticklebacks were very much offended with the manner in which they were treated by the goldfishes, and that they avoided contact with the latter as much as possible.

The goldfish seemed to know quite well how beautiful they looked, for they swam about in a most idle and affected manner. They took practically no notice of the tadpoles. Perhaps this was a good thing for us; I myself was not desirous of being disturbed, as I was feeling rather sad and despondent, for my poor brother had been removed from our house, and I missed his company considerably.

Since this, life for us has been almost uneventful except for the change which takes place. We are turned into another jar while our own is being cleaned. This is rather a curious procedure, for our old pond was never cleaned out. Even now I cannot help thinking about the home from which I was so cruelly taken, and

"Though I wonder oft what my future will be,
I shall always long for my liberty."

G.M.H.

* * *

THE PASSING OF SPRING.

Have you watched the tree buds swelling,
Bursting with the news they're telling,
Of the coming of the Spring?

Have you seen the white pear-blossom,
Pearly masses 'gainst the blue,
Shedding far and wide its petals,
Spreading far and wide its message,—
Spring is coming, Spring is here?

Have you seen the chestnut's emerald
'Gainst the ruby of the maple?
Or the stately beeches opening
Silken fringed greenery?
Or the deeper tingéd hornbeam,
Or the golden green of oak,
Laggard, with the grey barked ash,
Last of all to bring the tidings,—
Spring is coming, Spring is here?

Have you heard the cuckoo calling,
Bidding all the world rejoice,—
Spring is coming, Spring is here?

Primrose, celandine and wind-flower
Join the chorus, Spring is here.
Bluebells fill the air with fragrance,
King-cups, cowslips, follow on;
Lords and Ladies, starry stitchwort;
Speedwell shows its brilliant sapphire,
Violets still are found by seeking,
And the pale anemone.
Hedge and ditch alike are jewelled,
Spring triumphant everywhere.

.
Have you seen the emerald chestnut
Fade into a russet brown?
Dry and withered leaves are falling,
And the boldest,
And the first to bring the glad news
Is the first to tell the tidings,—
Spring is passing quickly by.

Have you seen the bluebells fading,
Bid the primroses farewell
For the ruby of the maple
Scorches 'neath the midday sun.
Dust has covered all the hedgerows,
And the cuckoo's song is done,
And the roses bring the message,—
Spring is over, Summer come.

"HERNE THE HUNTER."

On his return from business, Pilkins had called at his library and borrowed Harrison Ainsworth's novel, "Windsor Castle." Being a bachelor and independent of any female intervention, he was able to finish the volume before he retired to rest. It was in the early hours of the morning that Pilkins retired to rest, with a feeling almost akin to fear at the thought of passing what remained of the night in a large bedroom—solus. Before the shadows on the wall had time to resolve themselves into weird and fantastic creations his fevered brain was at rest. But it seemed to him to be but a few moments since he had closed his eyes before his peace was rudely broken by a blast from a bugle. Turning over on his side, Pilkins inwardly cursed the unlucky wight who dared to disturb the neighbourhood at such an hour. Yet there seemed to be something that was not quite orthodox somewhere. The feeble light from the moon had paled before a phosphorescently blue flame that filled the room with a feeble glow.

Thoroughly awake, he sat up—to see before him a figure, clothed from head to foot in the long robes of a monk. The spectre was unusually tall, and the pale light was reflected from a pair of antlers that were attached in some way to the head of the figure. Naturally Pilkins was somewhat taken aback at this strange apparition, but ere he had recovered from the momentary shock that his nerves had sustained, he realised that his visitor was none other than—Herne the Hunter. Now Pilkins was polite to a fault, and almost mechanically he motioned the intruder to a chair. Herne appeared to be meditating on something deeper, for he did not appear to comprehend the force of the remark, and began to speak in a discordant and harsh voice.

"You must know, O mortal, that the varied reports that may have been brought to your notice regarding my personality are, in the main, so untrue and misleading that I resolved to appear to you, at my own personal risk, so that through you the world might know the true story of one who accounted the authority of princes as a very little thing. Know, then, that in the reign of Richard the Second, I, a keeper in his Majesty's

forest at Windsor, became enamoured of a nun in a neighbouring cloister. The impossibility of a union threw me into a despondent state from which there seemed no exit. One day, whilst walking in the forest, and meditating on my fate, I had a vision in which his Satanic Eminence appeared to me. On his side he was to arrange for our union, but he predicted that our happiness would last but a small time. Overjoyed at hearing even this, I tremblingly demanded what his terms were. After her death I was to come to the forest the night following the final obsequies. I should meet him under an oak whose gnarled branches already had attached to them various dark legends, and here our bargain was to be completed. On awakening the vivid reality of the whole affair convinced me that it was more than a dream. Means were found by which the nun was released from her vows, and the union took place. At length I repaired to the old oak, where my Master—for he was now such—unfolded his plan. My soul was to be his, and I was to dwell in a cave that he would show me. That I might not expire in the usual way, he showed me the use of the Elixir of Life and the secret of rendering myself invulnerable.”

Here the spectre paused and seemed to be collecting his thoughts. Pilkins, now becoming interested in the story, pointed to a flask of water and a glass. Herne, however, proceeded without noticing his action.

“I lived here, then, for many a long year, directing all my thoughts to the discovery of such magical properties as would render me the terror of all travellers. I was also given the power of transporting myself whither the exigencies of the moment called me. After some time I lost all the better instincts that I had once possessed. My object then became to gather round me a band which, although under my control, should serve as companions at the midnight hunt. Henry succeeded in killing many of my band, but this merely proved that I was invulnerable.”

Pilkins, now growing curious, took the liberty of interrupting the figure in the hope of learning what befell him at the great explosion. “Ho!” cried Herne, starting up as though from a lethargy, “the insubordinate knaves. After I had saved them from the revenge of Henry, for their feeble brains to conceive the puny idea of blowing ME up—as though, forsooth, I were a common Jack-in-the-box, to go off at their pleasure.”

Pilkins, rather alarmed at Herne's energy, refrained from further questionings, and the demon continued.

"It is needless for me to bore you with an account of my actions from that period to the present time. How I passed long periods of time at the head of a numerous band, while at others I roamed through the forest, solitary. Let this suffice in the place of a story, that History, so far as it is connected with Windsor Castle, is affected more by my actions than the Historian-logician imagines. But yet, perhaps, I may not have sufficiently explained to you the cause of this nocturnal visit. It is this. His Satanic Majesty, when the bargain was driven, made this concession. If by the end of a certain time I should have, by diligent application to the mysteries that pertain to the Evil One, set at nought all Civil authorities, then I should be allowed to die in the usual manner. The time has now come ; but before I leave this earth I resolved to give to all some account of my actions, more authentic than that of historians."

With these words the demon hunter passed through the door, and the pale blue light gave place to the faint glimmer of approaching dawn. Nothing tangible remained to convince Pilkins that all was not a dream, brought on by a fevered imagination. Yet despite all the rational arguments that could be advanced against the credit of the spectre, there still remained this fact: that Pilkins recollected perfectly well—and will continue to do so—those words spoken to him at the dead of night by one who had flouted the authority, time after time, of the imperious Henry, and whose antlered head still remained on his shoulders.

R. B. ORAM, VIB.

COLLECTIONS AND RECOLLECTIONS.

SOLUTIONS.

(1) Let H represent a halfpenny, F a florin, and X a blank space—then the five positions of the coins are represented thus :—

Initially	X X H F	H F H F	H F
After first move	F H H F	H F H X	X F

After second move F H H F X X H H F F
 After third move F X X F H H H H F F
 After fourth move F F F F H H H H X X

(2) Let the ten matches be represented by A B C D E F G H I J. Move D on to A, F to I, H to C, E to B, and G to J.

(3) Four.

(4) Since the difference between any number, and the sum of its digits is divisible by nine, the first remainder obtained is divisible by nine, and, therefore, the sum of its digits is also divisible by nine. Hence the figure struck out of this remainder is the difference between the sum of its remaining digits and the next highest multiple of nine.

(5) The four matches must be placed to form a tetrahedron.

(6) Four.

(7) It is said that Josephus placed himself in the 31st, and his friend in the 16th place.

* * *

COMPETITIONS.

Again we have been asked to remind our readers of the Reading Scheme that was drawn out for Forms IV, V and VI at the beginning of the year. An examination paper giving a wide choice of questions on the books set will be held early in next term, and it is hoped that last year's good standard will be reached again.

Prizes will be given for the following Botanical Subjects :—

Form IV.—For the best and most carefully arranged collection of fruits and seeds illustrating the different methods of seed dispersal.

Forms VI and V.—For the best set of drawings of not less than six plants illustrating the flora of some special habitat, e.g., meadow, wood, moor, pond or seashore. The drawing should be accompanied by brief descriptions indicating, where possible, the response of the plant to its surroundings.

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