THE AVENUE



JULY 1916

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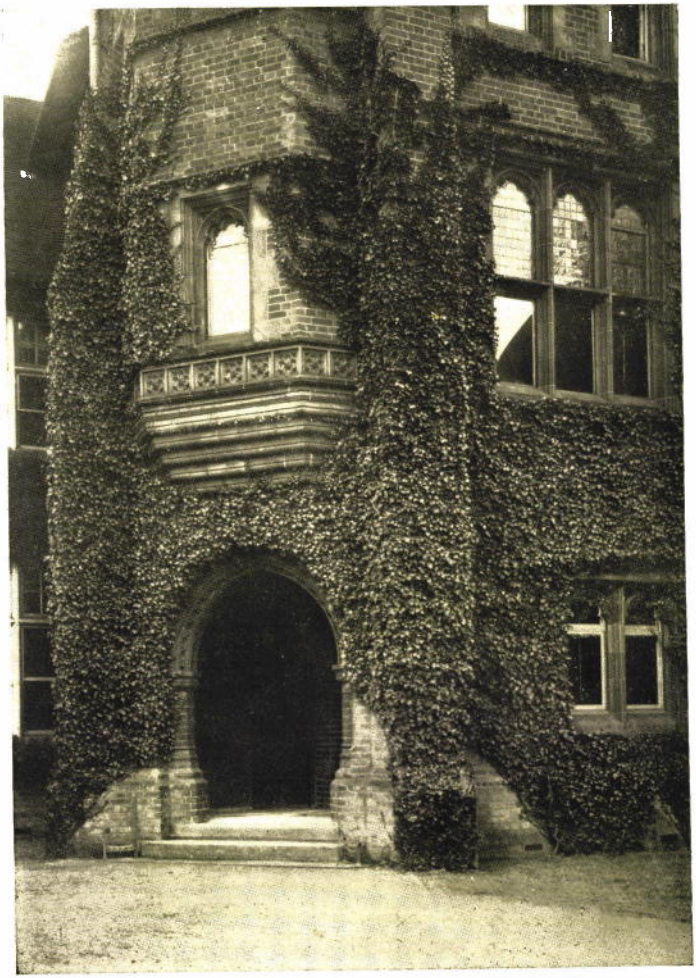


Photo by] [J. E. Walker.

THE PORCH.



The Magazine of the Friends' School, Saffron Walden.

VOL. VII. JULY, 1916. No. 20.

FOREWORD.

THE school re-opened on May 3rd, and many of us were surprised to find that Miss Barnard would not be in the position she has held for so many years. At least, she will not be Boys' Matron during the present term, though it is possible that she may return in September. To Miss Watkins, her successor, we extend our hearty welcome.

We have scarcely had an opportunity of seeing our new nurse, Miss Waring, since an outbreak of measles, two days after the beginning of term isolated her. We regret that, up to the time of going to press, the outbreak has shown no signs of abating.

We regret the loss of Miss Porter—who left us to be married in June—while cordially welcoming Miss Bird, who has taken her place on the Music Staff.

The result of the appeal for exemption from military service by Mr. Pearson, Mr. Whitlow and Mr. Radley was

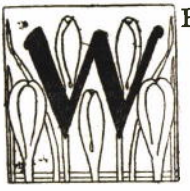
known shortly after our return. The first two have been exempted on condition that they undertake work under the Friends' Ambulance Unit, but Mr. Radley, on refusing to do any work other than teaching, obtained exemption from combatant service only.

The change from actual to summer time has made little difference in the school routine. The chief differences noticed are that the air feels unusually fresh before breakfast, and the light at bedtime still seems as bright as at three o'clock on a winter's afternoon. More definite advantages will be felt during August and September, when the evenings would ordinarily become shorter.

ENID ALLEN.

SCHOOL SOCIETIES.

VII.—SCHOOL MAGAZINES.



HEN the *Avenue* was commenced, it was stated in the "Foreword" that there had been several attempts in the past to produce a School Journal, and mention was made of *The Echo* of 1866. At that time, I believe that few, if any, of us had the slightest idea of the number of attempts that had been made, but research into the Minute Books of the "Juvenile Literary Society" has unearthed very many. Even now I doubt if we have found out a complete list of such School Magazines, but here the attempt is made to trace them, and to show their connection with the great central trunk from which these different school activities have sprung—the Juvenile Literary Society, dealt with in the first articles of this series.

In searching through these early Minute Books we come across the following Minute of the 6th of Sixth Month,

1830. "A proposition has been made at this meeting that some person or persons properly qualified should commence editor of a sort of Gazette; the following members are appointed to draw up a plan for the consideration of a future meeting." The committee thus appointed brought in a report in eighth month, in which they suggested that five members should be appointed as Editors to select from contributions; and when they did not receive a sufficient quantity "they shall add enough themselves to make up the deficiency"! They followed this up by submitting a prospectus of the Gazette, which took its name, THE MONTHLY PACKET, from the first heading of the Magazine, which was to contain items of recent interest in Croydon or the School, "taking care that the instruction as well as amusement of the members should be in view." Then should follow "British and Foreign Intelligence," and finally "Miscellaneous." "This head may comprise any interesting subjects that may come under the notice of the Editors, which cannot with propriety be classed under the two former heads." The meeting agreed and appointed five Editors, and the Committee themselves produced the first number at the same meeting. The minute closes: "It is to be understood that the paper shall always undergo the inspection of the Superintendent, before it is produced at a meeting."

After four numbers had been produced the Society had "under its deliberate consideration the discontinuance of the *Monthly Packet*," and resolved that the Editors should only be responsible for the first two headings, "leaving the rest blank unless supplied by other individuals." Seven more numbers were produced, and then, on the 7th of First Month, 1832, it was agreed that "the Editors in the future shall not be expected to prepare it."

Unfortunately there is no copy in existence, so far as we know, of this first School Magazine of which we have any knowledge. Of its successor, the CRITICAL GLEANER, we

know only the name, as the only reference we find to this is an article in *The Miscellaneous Instructor*, the earliest extant magazine, signed by "the Editor of the late *Critical Gleaner*.

With THE MISCELLANEOUS INSTRUCTOR we tread on surer ground. In 1836 numerous minutes read: "The —th number of the *Miscellaneous Instructor* has now been read and the paper has been given to the Secretary to be preserved." So well did he perform his task that all the fourteen numbers of this magazine are bound together and in good condition to the present time—eighty years after they were written. All the numbers are written on unruled foolscap, in that beautifully neat handwriting which was more common in those days than it is now. The first number begins with an *Introduction*, commencing as follows: "I have lately noticed, with regret, the want of general information among the Members of our *professedly Literary* Society, and my thoughts on this subject have induced me to commence a periodical in order in some degree to obviate the deficiency in question." The periodical consisted of eight pages of information—nothing light or frivolous here! The first article is *A short general sketch of Geology*, and each number concludes with a *Select Biography*—lives of such men as Socrates, Diogenes, Flavius Josephus, William Cowper, and William Wilberforce—a formidable list, and hardly less formidably written. Other articles are *Descriptions of Amphibious Animals*, and *Descriptions of various kinds of Coal*. In response to a request from the Editor for contributions, one who signs himself "Historicus" sends a series with the title, *A Concise View of the History of Rome*. Another sends *A Sketch of the History of England*, but gets into trouble with the Editor for signing his article "Historia." A footnote reads: "I would just enquire whether I am to understand that a female addresses me, as the individual alluded to has chosen a female's signature. If this is

not the case I request that the signature may be altered before another part of the history is sent." "Historia" seems to have felt the snub deeply, as no further instalment appears, and the "Sketch" ends abruptly with the death of William II. It is interesting to note that though this was of course in the Croydon days, a reference to Saffron Walden is made in an article *On the Beauties of Nature.*

Minute 10 of the meeting held 15th of Second Month, 1837, after stating that the fourteenth number has been read, goes on to say: "a note has also been received from the Editor stating his intention of discontinuing his paper for the present; this meeting after hearing the above, although feeling regret at its contents, is inclined to express its thanks for the able manner in which it has so long been conducted."

Rather more than a year later, however, another letter is read from the Editor proposing to start a second series if the Junior Literary Society will contribute. As a result, fifteen members volunteer an essay once each two months. Evidently they did not rise to their agreement, for six weeks later a minute reads: "the agreement shall be considered binding upon each of them, except upon the condition of paying sixpence towards the funds of the Society." Here, surely, the advantages of a Board, such as that by which the *Avenue* is managed, are apparent! Three months later seven members are allowed to withdraw from their undertaking, and next month the agreement is to be considered as no longer binding. The second series, however, continued at least till sixth month, 1839, when the last reference is made to it in the minutes.

During 1842 and 1843 references are made to a periodical entitled THE MISCELLANEOUS REPORTER, but of this we have no copies to refer to. It is interesting to note that after a minute recording the reading of the third number, the next minute reads, "It is agreed to take in a monthly periodical called *The Friend*, the first number of which has been introduced at this meeting." This was in February, 1843.

The next magazine to appear was THE CROYDON SCHOOL, MONTHLY MAGAZINE. This was apparently not under direct control of the Junior Literary Society, as a minute of August, 1846, mentions that it is agreed to take it in. This was the only journal till *The Waldonian* to be printed, and was sold at 1½d. a copy, consisting of eight pages of printed matter. In the *Introductory Remarks* the Editors tell us their objects. "They are simply these: to encourage amongst the circle in which they move a taste for essay writing; and to furnish a channel by which original productions of this description may be rendered available for the amusement and instruction of others." Of amusement I fear that there is not much, but of instruction there is plenty, as the following titles of articles will show: *A Plea for the Lead Pencil* (to poetic souls!); *The Influences of Flowers*; *Beauty—a Comparison* (a poem); *The Visions of a Philosopher*; *The Portraiture of Letter-Writing*. We wonder what the schoolboys of those days were like! The last article, at the end of the twelfth number, is headed *Obituary*, which begins, "Died, at his residence, on the 1st of Fourth Month, 1847, the Croydon School Monthly Magazine." "It is a matter of consolation to his sorrowing friends that his . . . dying song was chanted in as vigorous and hopeful a strain as any of his lays." "He appeared perfectly sensible to the last, and expired in the arms of the press on the anniversary of the very day that brought him into existence." Perhaps this last contribution was inspired by the remembrance of the editors that they had promised some "amusement" in their *Introduction*, and their feeling that the magazine must not die without their promise being fulfilled.

As this is the last of what we may perhaps call the heavy-weight periodicals, it seems a fitting place to close the first part of our survey.

J. PENROSE WHITLOW.

(To be continued.)

VERNON.

VERNON is a small Norman town on the banks of the Seine, about midway between Rouen and Paris. It is shut in on all sides by wooded hills, and the river flows between in zig-zag curves. It is a quaint little town with a most interesting history. It is mostly patronised by prosperous business men, who like to get away from the noise and bustle of Paris to spend a quiet week-end amongst such picturesque scenery.

The river divides Vernon into two parts—the old part on the left-hand side with its narrow main streets and cobbled roads and side walks, and the projecting upper stories of the shops, which all tend to give it an unreal and old-world appearance. The market-square, also, is on this side of the river. Here on market day the peasants of all the neighbouring villages come to sell their wares. The stalls are arranged in rows in the great square round the fountain, a wonderful piece of workmanship carved in white marble.

Turning to the right and then back towards the river, you enter a long straight avenue of beech-trees. The centre of this road is asphalted, and is for motors and heavier traffic. This is bordered on either side by a row of beech trees, cut back on two sides so as to form a dense green wall, supported by many pillars. Then there is another narrow path for cyclists, then another row of beeches, and then the path for foot-passengers. At the end of this avenue stands a fine old church. It is very large for such a small place, and is exquisitely carved on the outside. There is a small hexagonal tower at each of the four corners, from which rings of fierce-looking gargoyles project at regular intervals. Round the main door, which is about twenty feet in height, are two rows of little statues in niches. They represent Christian saints

and martyrs, and the twelve apostles. The door itself is a massive oaken one, studded and bound with iron, but this is never opened on account of its size. So two smaller doors have been made in the lower part of it, and through these most people enter the church.

Another thing of interest is the Norman tower, built by Henry II. of England. The outer walls are four feet thick. The main halls with their stone floors and vaulted ceilings supported by numerous stone pillars, extend under the ground far beyond the area covered by the tower itself. These rooms and towers are gruesome enough, but the cells themselves give one even more the feeling of being shut up in a grave or an Egyptian catacomb. The Dining Hall is on the next storey, to which you ascend by a stone spiral staircase which winds round a massive stone pillar, which is carried right through from the dungeons to the battlements. The Dining Hall is a large, bare room with a flagged floor, and the ceiling is supported by great oak beams. The only means by which light and air is admitted is through long narrow apertures, which are about six feet long and one foot wide on the outside, but get wider and wider as they reach the inside of the wall. Through these the archers used to shoot when the tower was besieged, which not infrequently happened, as it was just on the borders of Normandy. It occupied an excellent position over-looking the river, so that it could stop any boat which it did not want to let through and make it pay heavy tolls. As by water was by far the easiest mode of travelling (and in some parts the only way), the French were very anxious to get possession of it.

Above the Dining Hall is another room exactly like it, which was used as a sleeping apartment. The spiral staircase then continues up to the roof, where it ends abruptly, and there is nothing to prevent anyone who might go up in the dark from walking too far and falling; for there is nothing to indicate its termination except the presence of an extra wide stair.

The door leading on to the battlements is so small that at first one might mistake it for one of the loop-holes, of which there are many. It is really quite a relief to get out into the sunshine again. From the roof you get a good view of the sparkling river as it winds in and out among the hills, with the great barges slowly floating down the current, and the smaller pleasure boats skimming lightly along the surface among the numerous wooded islands. In the days when it was occupied they used to keep a man on duty to watch the river, for by this means they could always be prepared for their enemies long before they arrived, as the river winds so much that the distance by water is about twice as far as it would be in a straight line.

Beyond the remains of an old bridge which was carried away in a flood, we see an old house called Les Tonnelles because at each corner is a turret, surmounted by a cone-like roof of red tiles. This forms a very picturesque contrast to the ivy-grown grey walls of the towers. One of these towers is supposed to be haunted. One of the rooms in that turret had had the windows and door walled up, and when the owner of the house had had the wall in front of the door pulled down, he entered the room, but found only two skeletons, the remains of a fan and an old sword grown rusty with age.

Lilian S. Dell.

JOHN MORTON STRAKER.

THE following poem was writted by Maude G. Tyler, in memory of her cousin, John Morton Straker, whose earthly life ended at his home on May 6th.

His time at Walden was very short, for he came to us only at the beginning of 1916 and before the Spring Term was over symptoms of tubercular trouble had reasserted themselves.

But even in that short time at school he impressed us by his spirited disregard of physical disabilities and by his intellectual gifts. Those of the scholars and staff who knew him best will not soon forget his lovable nature and keen desire to be of service.

"Storm-toss'd and spent, with long dark clouds of pain,
Yet floods of sunshine over-coming all,
And much brave laughter issuing from the decks,
Your gallant ship has reached the Farther Shore,
Too soon for us who fain would draw you back
To the broad sea of human life again;
Too soon for us who watched your short bright course,
Whose barques are chartered for a longer route.
But God knows best—His Hand was at the helm,
The winds of His glad heaven bore you on,
Guided you o'er the rocks and through the shoals,
And brought you safely into port at last;
Dear little Sailor, fain we'd keep you here,
But leave you in God's Harbour, anchored fast."

LIFE ON AN AMBULANCE TRAIN.

I PROMISED to give some account of our life on Ambulance Train No. 17. We left for France at the end of November and after waiting a week at a base town for the train to come in, we joined it in time to see the previous personnel leave. Not till we got to France did we realise that we were to replace paid men already on the train.

The train was built by the Great Eastern Railway Company. First there are ordinary third-class corridor coaches, which are used for those patients who are not too bad to walk on to the train and sit up. Curiously enough, there is one coach with pictures of High Street, Church Street, the old Sun Inn, etc., at Walden, and irony of fate! there is a large advertisement


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of the G.E.R. service to Hook of Holland, Hamburg and Bremen.

Next to these coaches we have administration coaches, including our personnel coach, dispensary, kitchen, store rooms, a staff coach and then another kitchen. Finally we have the coaches for lying-down patients. These contain thirty beds in tiers of three, have double doors in the centre and a small kitchen and lavatory at the end.

Our personnel coach is just an ordinary third class coach with compartments as usual. We live four in a compartment, and to make this possible the seats have been removed and four bunks have been fixed in place. In these we sleep, but during the daytime the top bunks are tipped up so that the bottom two can be used as seats. On high are two deep shelves for our kit. Although the space is rather cramped yet we are now quite used to it, and we can sleep well and pass the day with some measure of comfort. We have even got used to shaving, sleeping, eating, while the train is being jerked along at thirty miles an hour by a French engine-driver.

We are usually stationed in a garage in some out-of-the-way village, so that while not actually in use we shall not hinder the traffic on the line. But when a " movement order " is handed in away we go down the line, making our preparations in the wards for our patients *en route.* As soon as we arrive at our first loading place, word is sent along as to how many we are to expect, and presently at the approach of wounded officers we lower a step-ladder for those who are able to walk. In the officers' ward we take both " lying down " and " sitting " cases, seats being made up by a special arrangement of lowering beds. When all the " sitters " are in, the stretcher cases are brought. As each one is lifted into the train an enquiry is made as to the extent of the injuries or sickness, in order to enable the man in charge to determine in which tier the patient is to be placed. The stretcher is then lifted to the level of the bed, the patient is helped off,

and then the stretcher is passed out to make room for the next. The whole process has to be done expeditiously as the loading must not occupy too much time. We then move off, and records are made to be sent to the clerk, who despatches them to the proper authorities.

By this time lunch has to be served. Tables are set up and laid for the " sitting-up " patients, and bed-tables are prepared for those lying down. The lunch usually consists of Machonachie stew, fruit, biscuits and cheese. As quickly as possible after the lunch the tables are cleared and the dishes washed in the small kitchen provided at the end of the coach.

When the next loading-place is reached we stop and the same process is repeated. So we go on collecting wounded from places near the firing-line until the train is full, and then we begin our journey to the base. Tea is served during the afternoon, and all the time the orderlies are occupied in attending to the lesser needs of the patients. If anything of a serious nature has to be done either a nurse or the doctor is called, and during the trip the doctor and the nurses are constantly moving through the wards.

In spite of every care some men have found the journey too much and have succumbed to their injuries. If possible, any man found to be failing on account of the journey is put off at a convenient station, to be taken to a hospital so that he may make some recovery before proceeding to the base.

In the evening dinner is served and shortly afterwards all the patients are made comfortable for the night. The orderlies go off duty in turns so that all may get at least four hours' sleep. The train rolls slowly on with a monotonous rattle, whilst the orderlies on duty watch their patients, ready at a moment's notice to provide attention whenever it is needed.

News of our destination is received *en route* from those who direct the movements of the Ambulance Trains, and, as

we approach the base, the lights are switched on, the patients are served with soup or cocoa, and every preparation made for the unloading of the train. As soon as we reach our siding, motor ambulances dash up, the " walking-off " patients descend, and the others, covered with blankets, are passed out on stretchers to be taken in the ambulances to the hospital. This is the last we see of the patients. Our next duty is to count our blankets to see that we have the full number, and then, if time, we go to bed till 6.30 a.m. If there is no time, that is to say if we arrive in about 7 or 8 a.m., we begin to shake out the blankets. After breakfast we set in for a hard day's work, making beds, scrubbing floors, cleaning woodwork, polishing brasses, until the place looks spotless once more. We may stay in the siding for a day or two, and in this case we spend the time in cleaning inside and outside the coaches.

Our next load may be a load of convalescent men from the hospitals to a port where they are carried on to a ship going to England (called " Blightey " in soldier's parlance). Every soldier talks of the chance of a " blightey touch."

This is a short survey of our life. It has its trials and its pleasures, but above all, we feel that we are doing our share to help our country during this trouble without doing anything that would go beyond the spirit of pacifism. The effect of this work on the mind is to increase the conviction that war is wanton in its destruction of human life and more futile than one could think possible. Indeed, if it was not such a stupendous tragedy it would appear ludicrous.

[*Extracted from a letter written by John H. Quinn* (1901-1907)*from France, 20th April*, 1916.]

SOME WONDERS OF HORTICULTURE.

ON the Western slopes of the Coastal Range in California, bordered by the giant rosewood forests, is the cosy little village of Santa Rosa. The white houses are surrounded with flowers, one might almost say buried in flowers, and the whole forms a pleasing scene of brilliant colour, backed by the sombre hues of the forests, and beyond them, the hazy purples of the mountains. There are flowers everywhere, for the volcanic soil and climatic conditions are particularly good for their culture.

Here in this village lives a man who has spent the greater part of his life in the study of plants, and has produced many strange fruits and flowers. Dr. Luther Burbank is of English ancestry, and was born in Massachusetts in 1849. After a careful education at the common schools and local college, he was put to work at a plough factory. This, however, did not interest him, and he abandoned it to take up market-gardening, and grew so interested in his work, that instead of growing every-day vegetables, he thought he would see if he could persuade nature to produce some new species. Accordingly he set to work to force Nature to change the vegetables and flowers just as he wished, and as a result, he is to-day performing feats which would have caused him to be burnt for witchcraft not many years ago.

His first wonder was a potato, different in size, shape and taste from any that had ever been grown before. This he called the Burbank potato. Pleased with his success, he determined to start some experimental farms, and chose as his locality, Santa Rosa, which he found in every way admirably suited for his purpose. Accordingly he moved in 1875, and in a few years set up his experimental farms covering hundreds of acres.

Let us pay an imaginary visit to this flower-wizard's house. It is pleasantly situated at the foot of the slopes, shaded by huge trees. A thousand pleasant odours fill the air. But what are these tall trees bordering the road? The doctor's name for them will best answer the question. They are paradox walnuts, obtained by crossing an English with a Californian nut, and combining the virtues of each. Moreover, they grow faster, and their wood is ideal for the cabinet-maker.

A little farther on we come to another of his inventions. This again is a walnut, but different from any we know. To produce it Burbank chose all the nuts with the thinnest shells, and planted them, thus obtaining trees whose nuts were all thin-shelled. However, the birds and squirrels were the first to profit by this, so he had another attempt and literally made the walnut over again. He took the tannin out of it, thus improving its flavour, made a shell of a convenient thickness, and forced the trees to bear four hundred pounds of fruit annually.

Another of his trees, an improved chestnut, bears fruit eighteen months after it is planted, instead of taking from ten to fifteen years as it formerly did.

However, here we are arrived at the white gates which give on to his orchards. It is in this part of his work that Burbank has triumphed most. As we pass along the cool road we see hundreds of trees which promise to bear literally tons of fruit. One of his plum trees bore so heavily that it was necessary to strip twenty-two thousand plums from it in order to preserve the tree. The plum has undergone some marvellous changes through his skill. At first he contented himself with producing a stoneless plum, and changed the wild plum into a sweet fruit. But his ingenuity did not stop there. He began to invent new fruits, and one of the results of his labours is the "plumcot," obtained by combining a plum and an apricot, yet still having a taste of its own.

Another of his plums tastes like a pear, and yet another smells like a nosegay.

Now we come to the apple orchard, which is a mass of variety. In this orchard there are as many as four hundred different kinds of trees. Burbank has produced thirty-six different varieties of apples from the seeds of one apple, no two of which resemble each other.

Any fruit changes under his hands as he pleases. Cherries, strawberries, raspberries, he can give them all new forms and new flavours. One of his new fruits is the " primus berry," which was produced by crossing a Californian dewberry with a Siberian raspberry, the result being a fruit different from either parent in form, colour and taste.

But Burbank's greatest achievement was the discovery of a thornless cactus. He saw that if he could get rid of the spikes, the cactus would be good food for cattle, horses and sheep, so he experimented on it, and after a time obtained what he desired. Now not only cattle, horses and sheep, but also geese and chickens can thrive on it, and the plant is a tasty fruit for human beings to eat. The universe will probably profit greatly by this new cactus, and already several farms are producing quantities of it sufficient to keep four cows per acre for a year. Moreover, there is a liquid in the plant, so that animals fed on it require little or no water. Thus the deserts of the world might almost be populated.

But his flower gardens are the most interesting. We find ourselves surrounded by all manner of flowers, great and small, with strange smells and stranger forms and colours. The majority of them will be new to us. One of Burbank's chief hobbies is to create pleasant smells. For instance, he did not like the bitter smell of the dahlia, so he made it as fragrant as a magnolia. One day Burbank detected a faint smell from a bed of scentless verbenas and after nearly a year's search discovered the flower which gave out the odour, carefully preserved its seeds, and reared them, The result

is that now he has a bed of very strong, fragrant smelling verbenas.

As yet, he has not been able to make a blue rose, but he hopes to be able to do so soon. However, he has a blue poppy, and has increased the size and flavour of his roses. He has developed the common little field daisy into a magnificent plant with a flower from five to seven inches in diameter. There is a flower in his garden called the virgin white Watsonia, which is reckoned to be the purest white in nature. Another flower has been forced to bear a blossom nearly a foot in diameter, and hundreds of tropical plants have been induced to grow in his gardens under the ordinary temperate conditions.

The pampas grass, with its stately white waving plumes, has turned from white to pink ; a worthless Australian weed has been cultivated, and is now a handsome plant called the Australian Star, which, when plucked, keeps fresh, and retains its fragrance for an indefinite period.

On vegetables, too, Dr, Burwood has experimented. In his garden is to be found his " aerial potato," which grows above ground in all manner of shapes and colours. This was obtained by grafting a potato on to a tomato plant.

Another of his creations was formed by combining a peach, an apricot and an almond, and is a fruit *enclosing* an edible nut. Again, he has made a white blackberry, and, crossing it with a raspberry, obtained his " paradox " berry, which is an oval-shaped fruit, light red in colour.

Dr. Burbank has also performed experiments on corn. He estimated that if a new corn could be grown which would produce one more grain to each ear, the gain would be something like five million two hundred thousand bushels a year. Or if each potato plant could be persuaded to produce one more potato, twenty-one million more bushels could be grown. As it is, the Burbank potato is reckoned to add twenty

million dollars (roughly about four million pounds) to the wealth of the United States every year.

He has grown corn sixteen feet high, instead of the old average of eight feet, and producing thirty-two ears on each stalk!

But how has he done it all? This paper would not be complete without mentioning how such marvels have been performed.

During the forty years that Dr. Burbank has been working at his gardens, he has spent about a quarter of a million dollars (about fifty-two thousand pounds) of his own money on his expermients. For each test he may have used from half a million to a million plants, and rejected all except two or three. Only those which absolutely satisfied him were used.

The whole has been the result of forty years' patient study and untiring toil, and it may be that in the years to come many more wonders will be discovered which may change the face of the whole earth.

J. Frederic Butler.

SCHOOL ATHLETICS.

The Football Season, 1915-1916.

THE abnormal times through which we are passing had the effect of eliminating from our fixture list all First XI. matches. Under the circumstances this was perhaps just as well, since we should indeed have been hard pressed had we been called upon to create a First XI. During the Autumn term we had only three masters available for matches. In the following term our plight was worse, since the departure of Mr. Pumphrey and a "crocked" knee reduced the

nucleus of the First XI. to one master and one student teacher.

We were fortunate in being able to arrange a number of matches for the boys, and very successful they were; one match only was lost. The second term seemed to give promise of bringing even greater success, but unfortunately infection once more brought the season to a close.

Enthusiasm for the game has been high, and the tournament matches were keenly contested. In the first term, No. 10 bedroom, captained by House, obtained the bedroom championship. In the second term we began the School Tournaments, but wretched weather and infection prevented us from finishing them.

During the season Football colours were given to Montford, Jones, Tebbutt i., House and Quarrie.

This year for the first time a Lower School Gymnastic Competition has been held. Though there never was much doubt concerning the probable winners, yet great enthusiasm and keenness followed the announcement of a possible competition. Mrs. Peck, of Cambridge, very kindly consented to adjudicate, and she gave the honour of being the best gymnast in the Upper to Gibb and in the Lower to Welch.

	Played.	Won.	Lost.	Drawn.	Goals. For.	Goals Against.
Boys' First XI.	6	4	0	2	17	5
Boys' Second XI.	7	3	1	3	34	20
Boys' Third XI.	4	4	0	0	17	0

A. BRERETON.

GIRLS' HOCKEY MATCHES, SEPT. 1915—MARCH 1916.

During the first half of the season, four First XI. matches were played, three of which were won and one lost, the scores being 9—0, 9—5, 5—1, and 2—5, respectively. The Second XI. won both the matches played, the scores being 5—3 and 5—2. Only one match was played in the second half of the season, as all the others had to be scratched owing to infection in the

school; in that one we lost 7—2, though it was a very fast and enjoyable game.

The team this year has shown good combination on the whole, but the forwards are apt to break down in the circle, and the defence to fail in marking closely. The School generally might make more use of its ample opportunities for the practice of different strokes both on the field and playground.

E. ALLEN.

GIRLS' GYMNASTIC COMPETITION.

It was with great pleasure that I went to Walden on Saturday, May 27th, to judge the Girls' Gymnastic Competition. There had been an inter-form contest earlier in the year, and this was a competition for the cup between a class of girls drawn from every form. Thirteen girls competed, and soon after the class began it was apparent that the standard of work was excellent, and that there was very little to choose between the competitors.

As the lesson progressed it became even more difficult to judge, all the thirteen appearing to work almost equally well. Comparing the work with that of last year, it was decidedly better; the precision was better, and—even more noticeably—the *detail* was better.

The chief fault seemed to be a tendency to work before command, and a lack of emphasis on rhythm, and there were a certain number of mistakes made due to lack of concentration. The jumping—always a test of style—was well done, nearly every one remembering to finish her landing properly.

Finally the cup was awarded to Joyce Watts, whose concentration throughout was splendid. The remaining twelve were marked in order of merit, though there was no great difference between the first and the last.

R. B. PECK.

WARTIME ECONOMY.

THURSDAY morning saw the cooking class and ten other older girls quickly assembling under the archway, and then hastening down to the Town Hall to hear a lecture on "Wartime Economies," given by Miss Petty. This lady is known all over the country as the "Pudding Lady," because of her skill in that art.

As we entered the Town Hall our eyes were met by a number of bills and posters, illustrated by diagrams and pictures, arranged along the walls, beseeching us to "take care of the baby," and not to dress it in inflammable materials; to clean our teeth daily, to cover all milk; and to avoid intoxicants. These requests were accompanied by vivid pictures, the most remarkable being one of a child whose dress had caught on fire.

Then Miss Petty came, and we grouped ourselves round her; and she began to talk to us on the subject of foods, and gave us much valuable infromation. Brown bread and stale bread are very good for the digestion, and also for the preservation of the teeth. In North Italy the people bake their bread only twice a year, and consequently have splendid teeth. The Germans discovered that the husks, which had been scraped off the rice during the process of polishing, contained a certain valuable salt. They collect and sell it to chemists. The best kind of rice yet known is Japanese rice, which has been grown in Italy.

After this short lecture we were invited to inspect the stalls, and to ask any questions we liked. I think the most interesting things we saw were various articles of clothing made from old garments. Among these were a little jersey suit, a bonnet, and a petticoat, all made from old stockings! There were various other articles, such as biscuit tins which could be used as ovens, and fireless cookers or hay-boxes.

At the end of an hour we were obliged, though very reluctantly, to leave these interesting things, and to make our way back to the school.

Eva Diamond.

AN OUTLINE SURVEY OF SAFFRON WALDEN AND ITS REGIONS.

By Members of the Saffron Walden Survey Society.
Edited by G. Morris.

Section II.—*Geology.*

THE geological formations that form the land surface of the Saffron Walden area can be divided into three main groups :

1. *The Chalk* which underlies the area with outcrops on the valley slopes.

2. *The Boulder Clay* that overlies the chalk on the plateau top.

3. *Gravels* of at least four periods of deposition. These occur (*a*) in the valley bottoms ; (*b*) outcropping on the valley sides between the clay and chalk ; (*c*) on the plateau top (gravels of ancient drainage) ; (*d*) in pipes in the chalk.

The general outcrop of the chalk is from the N.E. to S.W., forming an ancient coast-line round the fen area of Cambridgeshire. The lower chalk is unrepresented in the Walden area, but approaches the junction of the Cam and Granta at Shelford. The junction of the middle and upper chalk outcrops along the north of the Elmdon-Strethall ridge, crosses the Cam valley at Littlebury and then runs due north past Chesterford, thence following the main chalk outcrop in a N.E. direction.

The middle chalk contains but few flints, and is bedded in lenticular or wedge-shaped layers. A good exposure is seen in the pit south of Great Chesterford. In this quarry is a soft marly band containing nodules of iron pyrites. Here



By courtesy of Geologists' Association.] [*Photo by W. T. Reader.*

GLACIAL CLAYS AND GRAVELS OVERLYING CHALK.

View from Field Bridge on the Saffron Walden Branch-line. School in the distance.

also may be obtained fossils such as Rhynconella, Tenebratulina, Holaster, Inoceramus, Micraster and Ananchytes.

The upper chalk is soft and contains well marked layers of flints, and is the characteristic rock seen in the pits and cuttings immediately surrounding the town. Fossils are rare, but Cidaris, Micraster, and Inoceramus can be obtained from the chalk, and sponges are not uncommon in the flints. Both upper and middle chalk are burned for lime, and the upper chalk, together with clay, is used for the manufacture of cement.

The boulder clay is well exposed at the cement works. It is slatey blue, weathering to brown, and consists mainly of chalk detritus. The chalk leeches out towards the surface of the ground. Analyses from this pit show the following :

Surface Soil	..	2.5 %	Calcium Carbonate.
Clay 1 ft. depth	..	18%	,, ,,
Clay 3 ft. ,,	..	25%	,, ,,
Clay 16 ft. ,,	..	42%	,, ,,

The clay contains well striated erratics from the north, some of which are evidently of Scandinavian origin, as well as fossils from the Jurassic clays of Cambridge. These are well preserved, and are often found upon the cornfields of the plateau. They include bones of Saurians, Gryphea, Ammonites, Belemnites, etc. The erratics in order of frequency are : Jurassic limestones, shale, etc., red chalk, carboniferous limestone, basalt and granite, metamorphic schists, gneiss, etc.

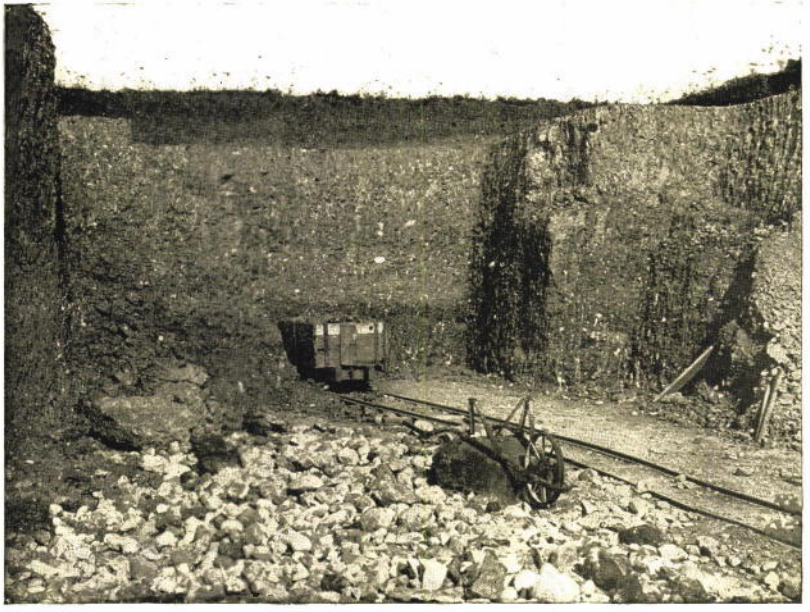
The clay shows considerable variation in thickness and texture. When it rests directly upon the chalk it often contains only a small percentage of clay material and consists almost entirely of broken and moved chalk. Occasionally dissolved chalk is re-deposited at the point of juncture and forms a thick, hard layer, two or three inches thick, known locally as " Manchester Stone." This bed often occurs on the lower slopes and in the valleys under clayish alluvium, washed down from the plateau.

The gravels of the valley bottom may be divided into two series : alluvium and river gravels. These form a level tract of varying width in the main valley and with extensions to the springheads in the lateral valleys. The gravel is bedded with sands and loam and is usually of a smaller texture and more water-worn than the glacial gravels beneath the boulder clay. The material is chiefly flint, with a certain amount of chalk and water-worn erratics and fossils from the boulder clay. A few Palœoliths have been taken from them, together with the remains of the Mammoth, Rhinoceros, Wild Horse, Cattle and Irish Deer.

The glacial gravels occur in patches beneath the boulder clay and often form an outcrop on the valley contour. The material is coarser and less water-worn than that of the river gravels and contemporary fossils are absent. Dissolved chalk is sometimes re-deposited and cements the gravel into a hard, concrete-like mass known as " Calcrete." Well borings in the Cam valley from Quendon to Chesterford show the existence of a buried channel with walls in some places almost precipitous. The depth of this valley is more than 300 feet below the present river level, that is to say it is below the present sea level and therefore shows a considerable sinking of the land surface since its formation. It is filled with beds of glacial gravels and boulder clay, and probably represents the detritus of glacial drift of various ages.

The ancient drainage gravels occur on the plateau top in the direction of Hadstock, and extend on towards the Gog Magog hills. In the Walden area they are too fragmentary to deserve more than passing mention.

In a chalk pit east of Newport station there is a pit showing a section of a chalk pipe or hollow filled with sand and water-worn gravel. The pebbles are flint, rounded by marine action, and the sand is much iron stained. Similar sands occur near Quendon and Debden. The wall of the pipe is lined with clay containing unworn flints. This lining is from three to



By courtesy of Geologists' Association.] [*Photo by W. T. Reader.*

BOULDER CLAY PIT NEAR SAFFRON WALDEN.

Glaciated Rocks Heaped in Foreground.

ten inches thick. A close comparison of this pipe has been made with similar ones at Lenham, which contain early crag fossils, and although no fossils have been taken from the Walden sands it seems very probable that they are of similar origin. This points to the fact that between the deposition of the chalk and the glacial epoch a considerable bed of marine sands and gravels was deposited over the area, and then removed by erosion. The sands and gravels in the pipes are remnants of this deposit. Further evidence of such a deposit is found in the numerous large blocks of silicious sandstone and conglomerate which occur in the boulder clay and glacial gravels. They are often very large and increase in number from West to East of the area. They often show gradation from the typical sarsen sandstone to the typical conglomerate known as " Hertfordshire Pudding Stone." These probably formed a hard layer in the friable sands and when the sands were removed, remained behind to be included in the boulder clay and gravel. These sarsens are often found standing by the roadside or built into the walls of barns and houses. Such examples are to be seen at Newport, Arkesden, Wendon cross roads at Strethall, etc.

A MOORLAND EVENING.

FOR miles in front of me stretch gorse and heather, bowing and shuddering gently before the evening breeze; and a little worn track, recorded in ancient manuscripts, winds onward round the hill which stands dark against the cloudless sky. On the top of a small hillock more closely covered than the rest, a herd of shaggy cattle bend their heavy steps towards a hamlet about two miles away to the left of the hill. They are blackly outlined by the still heavens.

The track from which I watch this fading scene is, like most others, deeply rutted by constant heavy wheels; and

boulders of considerable size, thrown off the way by rustic farmers or young lads taking their farm products to and fro, border the uneven track and throw long steady shadows about the coarse tufts of grass and heather. It winds between the blackening hills and threatening boulders like a peaceful rivulet among the hills and dales, and, sometimes dashing over little falls, again turns sharply on another course. So it passes over miles of rugged heather land, now this way, now that, avoiding this rock and turning from that mound, but still making for the little hamlet and the shining sun, still visible above the horizon.

Now the sun has gone, and nothing but the golden tinted edges of clouds remain to show its existence. It has passed from radiant evening into blackest night, except where the brilliant glow remains. And now there is apparently nothing in the world. All is in darkness, save when the quickly gathering clouds part for one moment to let through the twinkling of some lonely star, and I wend my way homewards through the gorse and heather.

H. Lionel Wright.

THE HOLIDAY READING CLUB.

FROM time to time during the last twenty years, some of the older girls and mistresses have formed a Holiday Reading Club. During the Easter Holidays this year such a club was formed by two mistresses and eleven girls.

The books read include two of Shakespeare's plays, novels by Dickens, Thackeray and Charlotte Brontë, and long poems by Tennyson, Scott, Whittier and Longfellow. Also a French and a Dutch book have been read.

Seven of the Club read the required books, and therefore received small book prizes from the funds obtained by entrance fees and fines.

Marjorie G. Harrod.

FAR AND NEAR.

Concerning Old Scholars.

Old Scholars who were in the Fifth Form last Term.

Edward P. Jones.

George A. Manasseh is at the Grammar School, Highgate, N.

* * * * * *

Mr. G. H. Evans, Science Master at this school from 1907 to 1913, has been gathered into the army, and after ten days' training was attached to a special brigade of the Royal Engineers and sent out to France.

* * * * * *

G. Merheim (1905-1908), now Quartermaster-Sergeant in the Royal Engineers, writes to express his thanks for the receipt of the *Avenue*, and his wish that the School will continue to do well.

* * * * * *

In a recent letter Gurnell C. Green (1891-1903) gives some account of his work as keeper of the stores on an Ambulance Train staffed by the F.A.U. He speaks of his inclination to try to obtain a transfer to the F.A.U. hospital ship, *Western Australia*, the special attraction being clean sheets and hot water.

* * * * * *

From letters written from somewhere in France we gather that Henry Skelton (1908-1914) has at last found time to take up the study of Natural History. He seems to have attacked the new subject with characteristic energy, and has sent a batch of specimens to be identified by Mr. Morris.

John E. Thurnam (1904-1911) *writes from Egypt :*

" I am having a great time in Cairo seeing the sights. I have just seen the Pyramids by night. We have been at Ismalia but this is a great improvement."

* * * * * *

Donald Ll. Redding (1912-1914), *writing from New South Wales, says :*

" I have moved from West Australia, and had a holiday in Melbourne with Laurie. We had some enjoyment looking at school photos, and it was interesting to compare his staff photos with mine. And now I am away in the ' back blocks,' thirteen miles from a town ; there is a store, pub., and blacksmith's shop eight miles away, if you can stretch your imagination far enough to call it a town. This is a bachelor establishment, consisting of three men only."

* * * * * *

Ernest C. Grimes (1905-1909), *in a cheerful letter from Flanders, writes :*

" We have had some queer experiences, some thrilling, I expect, though at the time we were too busy usually to have time to waste on thrills. Repairing lines under shell-fire, with a sniper unpleasantly accurate is not funny, although you laugh afterwards. . . . My brother is at present in hospital at Broadstairs ; he smashed his foot up across the sea in the mysterious ' somewhere.' "

* * * * * *

Extract from a letter from Ernest G. Montford (1901-1908), *who is in a Sanitary Section of the R.A.M.C. in Egypt.*

" In camp here we have the town on one hand and an endless desert on the other ; it is a wonderful contrast : houses and lights, streets and shops, motor-cars and trams, all that makes up municipal life ; a turn of the head and you see only the desert, sandhills stretching away to the further east, not a scrap of vegetation and no sight or sound of

human being. The main streets of the city are not unlike London or Paris or any other great capital, save for the great crowds of blacks, but when you turn to the side streets you meet with an endless variety of sight, sound and smell. Most of the buildings are flat-topped, and almost invariably there is an air of poverty about them; they are dirty and ill-kept, and their courts are squalid. There are of course many fine public buildings and some of the mosques have quite a style of their own. I shall never forget entering the courtyard of the Mosque at the citadel, trailing across in big soft slippers to the entrance, and standing there amazed at the simple dignity of the massive alabaster pillars, and the rich red carpets which cover the entire floor-space. . . . We had a lovely day at the Pyramids—they are just great massive blocks of stone, old, mysterious, majestic. From the summit of one there is a lovely view of the Nile, the fertile fields about it and vast stretches of desert beyond."

* * * * * *

It is with great regret that Old Scholars and others who knew Fred W. Newbery (1903-1906) have heard of his passing away at his home, on May 23rd, at the age of twenty-four. Since leaving school he had always shown keen interest in the Old Scholars' Association and has been on the Committee. We desire to add our own expression of sympathy to the many which have been received by the family.



DIARY.

March 7th.—N.H.S. Mtg. Lantern Lecture: "From Nebula to Man," Mr. Morris.

,, 14th.—Lit. Soc. Mtg. Boys' Diary, Bedford Deane. Essays: "Vernon," Lilian Dell; "The Development of the Newspaper in England," Philip Wright; "The Modern Lotus-Eaters," Mr. Whitlow. Pianoforte Solo, Frederick Butler. Song, Miss Porter.

March 21st.—N.H.S. Mtg. Exhibition of Specimens.

,, 25th.—N.H. Excursion to Little Chesterford.

,, 26th.—Lecture on "The Aliens' Camps," Mr. Robert Clarke.

,, 28th.—Lit. Soc. Mtg. Girls' Diary, Jessie Milne. Essays: "Early European Ideas of the World," Ruby Griggs; "The Life of Wellington," Edwin Ash; Duet, Violin and Piano, Miss Wright and Miss Clarke. Pianoforte Solo, Constance Wilderspin.

April 3rd.—Beginning of Scholarship Examinations.

,, 4th.—N.H.S. Mtg. Essays: "The Hawk-Moth," Marjorie Pollard; "Some British Animals," Frederick Tebbutt; "Trees round Walden," Eva Diamond.

,, 11th.—Lantern Lecture, "Italy," Mr. Whitlow.

,, 12th.—Beginning of holidays.

May 3rd.—School re-opened.

,, 9th.—Lit. Soc. Mtg. Boys' Diary, Edward Thomas; Essays: "A Proverb," Eva Diamond; "Some Wonders of Horticulture," Frederick Butler; "The Blue-bird," Joan McKenzie; "Colchester Keep," Alfred Cadman. Pianoforte Solos, Eva Diamond and Frederick Butler.

,, 16th.—N.H.S. Mtg. Exhibition and Competition.

,, 20th.—N.H. Walk to Grimesditch Wood.

,, 25th.—Lit. Soc. Mtg. Girls' Diary, Constance Wilderspin. Essays: "Peter the Great," Harry Dent; "The British Coinage," Marjorie Harrod; "Bacon is Shakespeare," Bedford Deane. Recitations, Lionel Wright and Joan McKenzie. Pianoforte Solo, Joyce Watts. Song, Miss Porter.

June 1st.—N.H.S. Mtg. Essays: "Norman Architecture," Bedford Deane; "Some Wild Flowers," Grace Appleton; "Trees," Daniel Burlingham.

,, 3rd.—N.H. Walk to Strethall.

,, 4th.—Lantern Lecture on "Temperance," by Mr. Harvey Theobald.

,, 8th.—Lit. Soc. Mtg. Boys' Diary, Marcus Matthews. Essays: "My Imaginary Friends," Jessie Milne; "Early African Explorers," Douglas Dickson; "Turner, Man and Artist," Gwyneth Morgan. Pianoforte Solo, Constance Wilderspin. Violin Duet, Dorothea Barton and Ernest Kilbey.

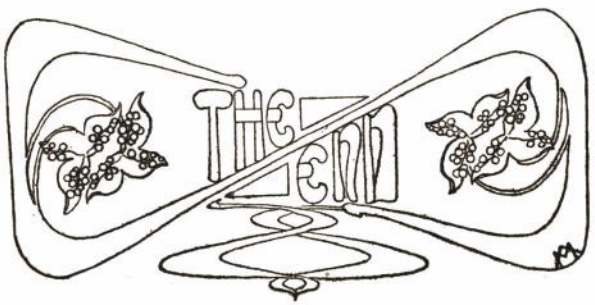
,, 12th.—Aquatic Sports in morning. Entertainment in evening.

,, 14th.—Cricket Match. 1st XI. *v.* Mr. Downham's XI., home, lost, 65 to 135. Mr. Whitlow, 19.

,, 15th.—N.H.S. Mtg. Essays: "Some Birds' Nests and Eggs," Rodney Hogg; "A Lane in June," Dorothy Emson; "Snakes and Lizards," Reginald Falkner; "Newts," J. Luther Hillary.

,, 22nd.—Lit. Soc. Mtg.—Girls' Diary, Gwendolen Hayes. Essays: "Earthquakes and Volcanoes," Cecil Falkner; "The Secret of the Mill," Marjorie Pollard; "The Youth of Napoleon," Mr. Marsh. Violin and Pianoforte Duet, Miss Clark and Miss Wright. Song, Miss Waites.

,, 29th.—N.H.S. Mtg. Essays: "Butterflies," Carl Engelmann; "Walden Abbey," Frederick Butler; "The DogRose," Joyce Watts; "Insects of the Pond," J. Henry Hobart.



NOTICES.

The next number of *The Avenue* will be published in December, price 6d. per copy (post free, 7d.). Price per annum, 1s. 6d. (post free, 1s. 9d.)

Articles and Subscriptions may be addressed to *The Avenue*, Friends' School, Saffron Walden. Copies may also be obtained from W. Russell Frayling, 24, Wallbutton Road, Brockley, S.E.

Articles in *The Avenue* written by boys and girls are signed in italics.

SCHOLARSHIPS.

The following scholarships have been awarded by the School Committee: J. Frederick Butler and Bedford Deane each £30 per annum for two years.

EXAMINATION.

Eva Diamond has passed the examination for the Intermediate Grade of the Associated Board of the R.A.M. and R.C.M.

SCHOOL MAGAZINES.

We acknowledge with thanks the receipts of the following School Magazines: *The Penketh School Magazine*, *The Saffron Walden Training College Magazine*, *The Stramongate School Magazine*, *The Island* (Sidcot), *By Kent and Skerne* (Polam Hall).

The Avenue Board wish to direct the notice of subscribers to the forthcoming publication by West & Co., of a piece of music entitled, "Thoughts," composed by *Eva Diamond.* The Board will be pleased to accept orders for copies of the music, which we hope will be on sale by the end of term. Price 1s. 6d. per copy.

HOLIDAYS . . .



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. . . AND FAR AWAY

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