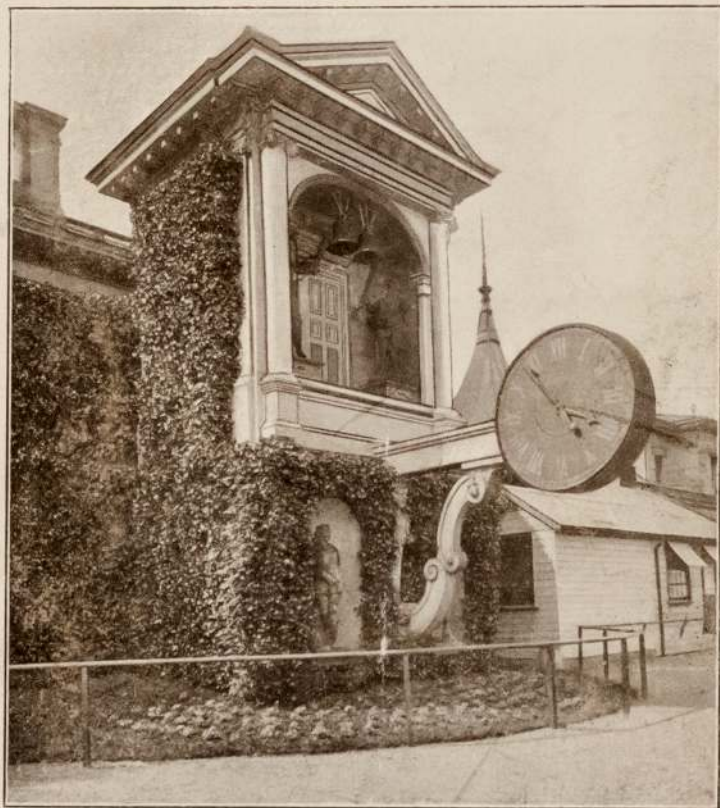


St. Dunstan's



Review

For the Amusement and Interest of Men Blinded in the War

St. Dunstan's Motto: "What the eye doesn't see, the heart doesn't grieve about."



(1) QUEEN ALEXANDRA AND SIR ARTHUR PEARSON AT ST. DUNSTAN'S PIERROT ENTERTAINMENT. THE BASKET IN WHICH THE MALMAISON CARNATIONS WERE PRESENTED TO HER MAJESTY WAS MADE IN THE WORKSHOPS. (2) THE ST. DUNSTAN'S PIERROT TROUPE.

St. Dunstan's Review

A MONTHLY RECORD OF WORK AND SPORT

EDITED BY IAN FRASER

No. 29.—VOLUME 3.

JANUARY, 1919.

PRICE 6d.
[FREE TO ST. DUNSTAN'S MEN]

EDITOR'S NOTES

WORK was in full swing again on January 9th, for St. Dunstanners returned from their Christmas holidays on the 6th, 7th, and 8th. We welcome a number of new men to the Hostel, and shall continue to do so for some months, for there are still many scores of men under treatment in the Second London General and other hospitals.

It is with justifiable pride that we record that no blinded soldier has had to wait for admission to St. Dunstan's, for we have always been a little ahead of the times, and have made provision for all eventualities.

The next six months will be the busiest period in the history of St. Dunstan's, for the number of men in training is now well over the 600 mark, and as we said above, there are many men still in hospital for whom accommodation will be provided.



JUDGING by the future sports arrangements mentioned on another page of this issue, interest in athletics will increase as the weather gets better, and the season ahead of us will provide a great deal of keen competition. Plans are being made to enable everyone who wishes it to take advantage of the proximity of Regent's Park Lake for rowing and sculling, and the fact that our numbers will be larger this year than any previous year, makes us confident that the coming season will prove to be full of interest.



It is a constant source of satisfaction to us to note the progress made by the many hundreds of old St. Dunstanners who are settled in all parts of the country. There is no better evidence of this progress than letters from the men themselves. Our practice of re-printing extracts from letters received from men in the pages of the REVIEW has, our readers inform us, proved most instructive. We shall continue this practice, and hope that men will take even more trouble than they do at present to let us know of their doings and experiences, for not only is it pleasant to hear news of the fellows who were with us at St. Dunstan's, but a record of their successes is helpful both to the men who are at present in training and to those whose business it is to instruct and make plans for the future.

A satisfactory point to be noted from news we receive of men who started out into the world in the early days of St. Dunstan's, and have had two or three years to accustom themselves to their new surroundings and to become practised and experienced at their craft, is that their earnings are not only constant, but steadily on the increase. We feel sure that future years will show even better results.

Editor.

NOTES BY THE CHIEF

[Since Sir Arthur left for America a number of cables have been received from him, from which we gather that he had a splendid voyage, and arrived in New York on Wednesday, January 1st. He found the weather warm there, and fulfilled a number of engagements in America before he left on Sunday, January 5th, for his proposed five days' tour in Canada. We understand that he is returning on the s.s. Adriatic, which sails from New York on January 25th, and should arrive in England during the first week of February. Before Sir Arthur left he wrote the following Notes.—ED.]

SOME months ago I wrote a note telling of the failure of experiments which had been made in France in the matter of training dogs to act as guides to blinded soldiers. The attempt to accomplish this started in a way which led to highest hopes, but the carefully trained dog guides when put to actual use, proved quite incapable and unsatisfactory. I have lately had a correspondence with Pte. W. J. Hopper, who left St. Dunstan's in September, 1917, and who was deprived of his right hand as well as of his sight, and who in his last letter writes as follows:—"I am pleased that you are interested in my dog 'Meg.' To start from the beginning, as regards her training I must confess I lost my patience with her, as she would persist in pulling me along. However, I persevered, and by degrees got her to go steadily. Now she goes fine. I have to give her a few whippings, of course. I adopted no special course of training—my idea in the beginning was to get her used to the town. This I did by going out with my wife, who walked at my side touching elbows, as it were, and checking the dog if she tried to

draw me from my wife's side. By degrees she began to realize that she must keep straight ahead. I checked her from the first from the habits dogs usually adopt, viz., taking notice of other dogs, and smelling about, etc. In short, if she strayed from the straight course she got severely reprimanded. She soon got to know what was required of her, and what houses and shops are frequently visited, and when I am nearing them I just say: 'Find it, 'Meg,' and she very rarely fails to do so. The worst thing I have to contend with is gossiping women and perambulators. 'Meg' is thoroughbred Newfoundland, and her height when full-grown will be about three feet." The leash I use is about one foot long. Now, Hopper worked out the dog guide problem in quite a different way from that followed by the French people. They used little dogs, who had to be taught to trot on ahead of the blind man. Hopper trained a big dog who walks by his side. When I first lost my sight I was spending most of my time in the country, and I several times thought of trying to train a big, quick-walking dog, who would come with me for country rambles, but I had not much time to spare, and one or two awkward experiences led me to abandon the idea. It does seem, however, to me, that a dog like Hopper's friend "Meg," might well be a very useful outdoor companion. Newfoundlands are usually credited with being extraordinarily intelligent dogs, and I have no doubt that this has something to do with the success of Hopper's experiment.

I DON'T suppose anyone in the world has more delightful letters than reach me, chiefly, but not all, from old St. Dunstanners and their folk.

Here is a very choice specimen which came to me a little time ago. I am sure you will all appreciate H. H. Merriman's

contribution to St. Dunstan's as much as I do:—

"Dear Sir Arthur Pearson,

"I have saved up 12s. 6d. for the blind soldiers and sailors. Daddy never saves up, so I do. I wear sailor's clothes. I am sorry I did not send in before; I waited to get as much as I could.—Yours affectionately, H. H. MERRIMAN."



HERE is a little table-manners tip. I think that people who do not see are far too apt to allow their food to drift to the edge of their plates, or often to deliberately put it there. To do this is very apt to lead to the depositing of food on the table-cloth with dire results from the point of view of the house-wife, especially if it is moist and greasy. I always take particular care to keep my food as much as possible away from the edges of my plate, and continually collect it in the middle by gentle scoops of knife, fork or spoon. I think it far easier to load one's fork up with the help of a knife from the middle of the plate than it is to try to do so with the help of the raised edge. Some blind people get into a very bad habit of continuously tapping on their plates with their knife, fork or spoon to find whether there is anything left uneaten on them. It is just as easy to make this discovery by passing the implement over the surface of the plate. One blind man whom I know is really a positive nuisance at meals, owing to the incessant tap-tapping of the blade of his knife or the edge of his spoon on the plate.

Another useful little table tip is to always pass your knife under your fork when you have cut off a piece of meat or anything else which wants cutting and are about to convey it to your mouth. One is very apt to do the cutting incompletely, with the result that the fork not only lifts the piece one wishes to eat, but trails another larger or smaller piece behind it. One very soon gets into the habit of automatically and quite unostentatiously passing one's knife under one's loaded fork as one lifts it from the plate, and if you will adopt this plan I think you will find a good many awkward situations

avoided. Yet another table tip. Be careful, after having had a drink, not to put your glass upon the blade of a knife which is waiting for the next course. It is quite easy to do this, and a very likely result is that as you pick up your knife over goes the glass. This is particularly likely to happen with a long-stemmed wine glass. I once had the mortification of upsetting a glass of wine over the lap of a lady who was seated next to me. It was bad for her dress, but good for me, for I do not think I have ever put a glass down on a knife blade since.



BOILED EGGS.—I wonder whether many St. Dunstanners have experienced the same difficulty that I have in satisfactorily dealing with a boiled egg. Lots of people seem to think that there is only one solution of the boiled egg problem to a blind man, and that is to boil it hard. Now, personally, I detest a hard-boiled egg, unless it comes my way on a picnic or railway journey, when one has to put up with it. At the same time, a soft-boiled egg, if attacked in the manner familiar to sighted folk, presents considerable difficulties. It is, in fact, just one of those little problems which on account of their very diminitiveness are the most annoying. The way in which I have solved it to my own complete satisfaction is as follows:—Allow the egg to get sufficiently cool to be handled with comfort. Then take it in the left hand, and crack the shell on one side, taking off a sufficient amount of shell to enable the subsequent scooping-out process to proceed satisfactorily, and continue to hold the egg in the left hand, transferring its contents to your mouth in the ordinary way. Provided that a careful start is made, you will not, I think, find that there are any difficulties. The slopping over which is so apt to happen when an egg is tackled as most people tackle it will not occur, and a perfectly clean and satisfactory job can be made.

Arthur Pearson

News of St. Dunstan's Men

F. H. BARNETT, of Paddington, Brisbane, Australia, writing recently, said :—

"Many thanks for your letter received a short time ago, and in reply thereto, I am pleased to be able to tell you that I am doing well and work will be in full swing at the commencement of the new year.

"I had a very pleasant voyage back, travelling via America and the famous Panama Canal, and afterwards calling at Tihiti, one of the Pacific Islands, where the natives gave us a grand reception and showered fruits and beads on us in great quantities. The journey took eight weeks and five days, the last three being spent in the train. All my luggage arrived safely, except my typewriter, which was badly knocked about.

"An old friend has given me two acres of ideal poultry land, within easy reach of the city by tram and train, and the local residents are erecting by voluntary labour, during the week-ends, a tip-top house.

"I do not expect to amass a fortune in five minutes out of two acres of land, but, taking into consideration the really splendid start I have been given, I certainly do expect to make things pay and show a little profit.

"During my stay at St. Dunstan's I learned Braille shorthand, and had intended it to be my principal source of income, with poultry-farming as a side line. I am keeping up my speed at shorthand. My wife, having formerly been a shorthand typist, acts as my tutor, and after we are properly settled down and the poultry farm is in ship-shape order, I hope to be able to start work at shorthand.

"We are at present staying at the seaside, waiting for our house to be completed, and we run up to town periodically to see how things are progressing.

"News of peace came through on Monday night, much to the relief and delight of all. Of course, everybody went nearly mad and cheered themselves

hoarse. As a precautionary measure against excessive jubilation, all public houses were closed for a week."

The following is an extract from a recent letter received from Lieut. R. L. Moore, who returned to Australasia in October, 1917 :—

"I am now on King Island, which is about fifty miles long and twenty wide, and is situated midway between Tasmania and Victoria. I had hunted and lived on the Island before the war, and know the people and the Island well. It is here that I have purchased land—150 acres of first class country, well grassed, for which I am paying £6 per acre. Next door there is an old-established dairy, which another returned soldier and I are leasing for seven years, and we are working the two blocks together in dairying. We have a herd of thirty-three cows to milk this summer."

P. Ashton, who was trained as a telephonist at St. Dunstan's, in writing to Sir Arthur, says :—

"It is now just twelve months since I left St. Dunstan's and started business as a telephone operator at the Headquarters of the 'Comrades of the Great War.'

"I must say that my first year as a blinded soldier has been a very successful one as regards business. My switch-board, although a small one, keeps me busy practically all day, and I think I am right in saying that I manage it quite well, and that my employers are well satisfied with my work.

"I do not use my shorthand machine very much for my work, as I very seldom have messages to take, but I am doing a good deal of typing.

"I have taken up as a hobby the study of French and French Braille, which I started at St. Dunstan's. I find it most interesting, and it may be of great benefit in the future."

—From all parts of the World

T. E. Skelly, settled in Batley, Yorks, recently wrote to Sir Arthur as follows on the subject of his first experience in getting about alone. We shall be interested to have the views of other St. Dunstanners on the "sense of obstacle," as it is called, which enables a blind person to "sense" an object in front of him and to avoid it when walking :—

"To-day is my twenty-seventh birthday, and I have marked it by taking my first walk alone. I got up very early this morning, and walked over a mile. As there was no one about I had nothing to distract my attention, and to my surprise I went down the centre of the pathway as though I could see.

"This afternoon I took a walk with a boy, and I told him not to tell me where I was, only to tell me when he saw any danger, and I did two miles with confidence. I may add that I have an instinct that seems to tell me when there is anything in front; although I have no eyes there seems to be a darkness before me when an obstacle is in the way."

J. Chisholm, a poultry-farmer, who has returned to North Auckland, New Zealand, writes :—

"... I am getting on quite as well as I expected, and, indeed, in some things better. I do not expect to be one of St. Dunstan's star financial successes, but am much happier now that I am working, and am a great deal stronger than I was when I left the Hostel. I am not able to work everyday as I suffer at times from swelled head. If this were induced by vanity it might be curable, but, as Fritz is responsible, I must make the best of it.

"I am spending my time in the garden, raising the level of the lower portions of it, and am breaking in new ground. The tree roots are the worst trouble, but I am getting on very well. I have a wooden tram-line for my wheel-barrow, and manage quite famously.

"We have a number of improvements on the place, and are shortly buying the ground. We have a good deal of hard work to do, but there is plenty of gum alongside, and, indeed, a part of the section will give enough gum to pay for digging it. The garden looks well, and we have already had our own cabbages, although it is only five months since we came, and the weeds were then nine feet high—pretty tall, but not a 'tall yarn.' We have had a lot of rain, and our concrete water-tank is running over, so we shall have a good supply of water."

G. Dawson, a basket-maker and boot-repairer, settled in Haverhill, Suffolk, in a letter to Sir Arthur, says :—

"I am just back after a week's holiday, which was very enjoyable. I am getting on very well with my work and get a great number of orders. The After-Care Department visitors have been very helpful, having obtained for me a number of orders and having given me several useful hints in my work."

W. Girling, who was trained as a masseur at St. Dunstan's, has settled at Brighton, and writes as follows in reply to a letter from Sir Arthur :—

"I fully appreciate the sentiments expressed in your letter concerning the happy ending of the war. Personally, I greeted the joyous news with great enthusiasm, for there seemed to be more than consolation for what I consider the small price I paid, in realising that I had taken my share in giving Fritz such a thundering good whacking.

"Now that it is finished and things begin to settle down to their normal conditions, it makes me realise all that you and St. Dunstan's have done for us; had there not been such benefactors I am afraid that our price would have been a thousand times heavier.

"I am doing very well in my profession and am looking forward to the future with every confidence, for we were taught a great lesson at St. Dunstan's in patience, perseverance and in all that overcomes difficulties."

W. Woods, another masseur, settled in New Zealand, also sends good news:—

"Everything goes exceedingly well with the profession and work is as brisk as usual. Besides the returned soldiers we have a great number of civilian patients to deal with. Massage is, without a doubt, getting well established in this country, and there is every prospect that the demand will be greater than ever in the coming years."

In a recent letter, H. Sims, a poultry-farmer, of Chobham, Surrey, said:—

"You will be pleased to hear that my pullets are beginning to lay well; I am getting eight and nine eggs a day, and I expect they will all be laying soon. My rabbits are doing well and I have just been given a pig, so I am gradually getting quite a farm."

G. Rhees, a basket-maker, settled in Battersea, also sent splendid news. He writes as follows:—

"I am glad to be able to tell you that the past year has been a very successful one, and at present I have more orders than I can deal with. Several of my customers, being satisfied with my work, have recommended me to their friends, who have given me orders which have kept me very busy indeed. One thing I must tell you, and that is that I owe my success to two things—the excellent training I had at St. Dunstan's and the fact that I have a splendid partner in my wife, who helps me in every way she can."

James Murray, who was trained at St. Dunstan's and has started work as a poultry-farmer in Kilkenny, writes as follows:—

"I am pleased to say that my poultry are doing very well, in spite of the fact that I came here late last year and had no

young stock for laying. I have twenty-two young rabbits, twelve of which are eleven weeks old and the other ten are two weeks old. I was very much interested to read the account in the REVIEW of the part that the St. Dunstanners took in celebrating the signing of the Armistice."

Testimony to St. Dunstan's Massage Training

WE are very pleased to be able to publish the following extract from a letter written by Major R. T. MacKeen, who is rendering such valuable services as a District Vocational Officer for Montreal to the Invalided Soldiers' Commission of Canada:—

"I hear from different sources of the excellent course which you give to men as masseurs. The experts in this work in this country feel, as a whole, that the training which is given by St. Dunstan's is very superior indeed, and insures complete success for those so trained."

Attendant Allowances

A GREAT many questions have been asked lately by men who have left St. Dunstan's, as to the meaning of a letter which they receive from the Ministry of Pensions, informing them that they are to be granted an Attendant Allowance for a period of three months.

The explanation is that Attendant Allowances are renewable only on Sir Arthur's recommendation being made each three months.

Men should not therefore think that the receipt of this letter means that their allowance is being stopped, but should forward it immediately to the Pension Officer, St. Dunstan's.

St. Dunstan's Address Book

AN Address Book, setting out names, regiments, occupations and addresses of all St. Dunstanners was published on January 15th, and has been circulated to all men who have left St. Dunstan's. Members of the Staff and men in training who want a copy may obtain one on application to the Editor.

Entertainment Notes

ENTERTAINMENTS during December were few in number in consequence of the Christmas "break-up," but those which did take place were of a very excellent quality.

The "Blighty Concert Party," organised by Miss C. Dickson, was at the Bungalow on the 2nd December, and the entertainment provided by them was very enjoyable.

On the 5th of the month, Miss Lena Ashwell's Concert Party gave one of the most successful concerts ever held in the Outer Lounge.

Christmas Pierrots at the House.

On the 12th December the Christmas entertainment was held in the lounge at St. Dunstan's, and the following account appeared in the *Daily Telegraph* the next day:—

Last evening Queen Alexandra, who was accompanied by Princess Victoria and the Grand Duchess George of Russia, paid an informal visit to St. Dunstan's, Regent's Park, in order to witness the Christmas entertainment given by the blinded soldiers, and a capital entertainment it proved, as everyone in the crowded audience will have cordially agreed. On arrival the Royal party were received by Sir Arthur and Lady Pearson and various officials at the hostel, among others present being Sir Robert Borden (Prime Minister of Canada), Captain Russell Roberts (Adjutant at St. Dunstan's), Mrs. Holland (Matron at the House), Miss Power (Matron of the College Annexe), Miss Wood (Matron of the Bungalow Annexe), Miss Leonard (Matron of Sussex Place Annexe), Mrs. Bates (the secretary), Mr. Kessell (treasurer), and Captain and Mrs. Fraser. On their way to the lounge, where the little stage was set up, Queen Alexandra passed through the ranks of the nurses formed up in a double line, and very spick and span they looked in their grey-blue uniforms and white caps and aprons.

A double number of "Black and White," thus ran the legend on the programme—the "black and white" being, of course, the merry pierrots—and one must add pierrettes, though all were Tommies—who were there to show their quality in song and quip. Everything had been made on the premises from those black and white costumes to the scenery that served for "Pillar Hall Pierrot Land," and one must not fail to place on record the invaluable services of Quartermaster H. Strathmore who, as chief orderly, had framed the musical bill-of-fare. And sightless soldiers, of whom there were some twenty in the goodly company, being happily of a cheery disposition, it was only natural that the programme should have been of the lightest pattern, providing a jolly blend of the gay and sentimental, the former predominating, with an inevitable sprinkling of ragtime.

There are some really good voices among the "boys" at St. Dunstan's, and no doubt on occasions those voices are turned to more serious purpose than was the case at yesterday's bright and mirthful entertainment. Even tenors are not scarce at the Regent's Park Hostel—witness the presence of at least three among the happy band of pierrots: Westall and Doyle, for instance, both of whom were heard in sentimental ditties, and Henshaw, who sang an unpretentious setting of Kipling's "Follow me 'ome" with excellent feeling. These and a spirited toast in praise of Mother England, contributed with great effect by Harding—aided and abetted in the refrain, like most of his companions, by a really capital and well-drilled chorus, were among the more popular features. Quartermaster Strathmore, too, proved himself an uncommonly good singer, with a voice of genuinely pleasant quality. Then, among the cheery exponents of syncopated time, were Trott and Downes, a wonderful lively performer the latter, and noted as the one-arm drummer of

the "Boys" Ragtime Band, despite his having only one finger. Nor must one omit mention of a particularly exhilarating concerted number, "Widows are Wonderful" (not dedicated to the memory of Mr. Weller), and a delightfully humorous quartet sung in what may perhaps be called "pidgin Italian," and with any amount of "go" by Strathmore, Taylor, Downes, and Betambeau.

When the jolly little show had run its appointed course and a few informal words had been spoken by Sir Arthur Pearson, loud cheers were raised for Queen Alexandra, followed by the singing of the National Anthem. On her way to the entrance hall Her Majesty had a kindly word to say to the members of the St. Dunstan's Ragtime Band, who had struck up the merry strain of "Honolulu" when the time came for the Royal visitors to take their leave.

ADMIRAL HALL, who intends to retire early in the New Year, tells an amusing story about an Irish sailor named Reilly, who was on his ship in his captain's days. The ship was in dry dock, and Reilly contrived to fall through the network of scaffolding and land on the concrete of the dock on his head. Miraculously, he was not killed, and was removed to hospital. Next day Admiral Hall called to enquire about Reilly. He was shewn the ward, and found Reilly's bed surrounded by a screen. A special nurse was in attendance. "You can't see him," she whispered, "he is still unconscious." Still, the Admiral advanced, and bending over the bed said, "Well, Reilly, how are you?" The unconscious man opened his eyes, gathered consciousness for a moment, and then said with the utmost unconcern, "Oh, it's you, you blighter." The Admiral was delighted, but his feelings were rather mixed when the nurse, in great relief, exclaimed, "Splendid: that's the first sensible remark he has made since he was admitted."

"SHUN!" shouted the Sergeant to his platoon; "Attend to roll-call. Those that are present will say 'Here,' those that are not present will say 'Absent.'"

Electrified Chickens

AMAZING FARMING EXPERIMENTS

EXPERIMENTS have lately been carried out on a poultry-farm in the South of England with such remarkable results that intensified chicken-rearing by means of electricity will undoubtedly be tried on a much larger scale in future.

Seventy-five chickens were electrified on this particular farm, the current being applied for ten minutes every hour during the day. Six chickens only, out of a total of 400, died, and the remainder were ready for the market in five weeks, as against three months normally. The electrified chickens grow at double the usual rates, thus doubling the output of the farm and halving the food bill per chicken.

Not only, however, in regard to poultry raising, but also in connection with the growing of crops is electricity proving invaluable, some remarkable results being cited by George R. Pears, in his work "Electricity Made Plain," a book of great interest to those who wish to gain a knowledge of how electricity can be applied to home life, as well as to commerce and business.

By an arrangement of wires, making a network about fifteen feet above the ground, electricity is discharged into the soil. The result in one case was that in a certain wheat crop there was a gain in the number of bushels per acre from the electrified plot adjoining. Furthermore, it obtained 7½ per cent. better market prices, producing a better baking flour. The cost of the electricity worked out approximately at one penny per day.

Similar electrical treatment to growing crops produced a 17 per cent. increase in cucumbers, 36 per cent. in strawberries, 33 per cent. in beet, 50 per cent. in carrots, and 18 per cent. in tomatoes, whilst other vegetables were also ready for market earlier than those which were non-electrified.

Boracic Acid

PROBABLY there is no chemical used in greater quantities at St. Dunstan's than boracic, for practically every man who has his eyes irrigated has this done with boracic lotion. The following extracts taken from an article by Mr. Fabricio Sarti, in the December number of the *Wide World Magazine*, should be of interest, for he tells us of one of the main sources of this useful commodity:—

The district of Pisa, in Tuscany, is largely of volcanic origin. In some parts of the province, and more especially in the neighbourhood of the little town of Larderello, the boiling springs which exist in the subsoil, issue to the surface in the form of numerous and powerful "gushers" or "geysers" of hot vapour or steam, and the evaporated steam finds its way into a large number of small pools. Some scientists visiting the pools, found out that the waters contained, in a state of dissolution, a very considerable quantity of boracic acid. It was soon discovered that the boracic acid came from the jets of steam issuing from the soil near by.

Boracic acid was discovered in 1702, but as it has never been found possible to manufacture the product artificially, chemists are dependent upon natural sources for its supply. Until comparatively recent times, boracic acid was in great request as an antiseptic, but has now been replaced by other and more powerful substances. Boracic acid continues, however, to be in great demand, both in its crude form and in the form of the various boraxes derived from it, for soldering, enamelling, glazing, and dyeing purposes. It is likewise used in the manufacture of soap, and even as a substitute for that useful article.

Most of the boracic acid in use to-day comes from Italy, especially from the Pisa district.

The "geysers" round about Larderello are saturated with the acid, which, as the steam evaporates into the pools, settles at the bottom of the pools.

The first attempts made to evaporate the waters of the pools, so as to secure the acid, were very primitive. Ovens were bored around the pools. These ovens were filled with wood, and kept alight until the waters had evaporated. This was a long and very costly process.

An Italian engineer then hit upon the very simple idea of utilizing the "geysers" or steam jets themselves, as the heating power for the evaporation of the acid-laden waters. The natural pools, into which the jets of steam projected the acid they contained, were abandoned altogether, and around the aperture of each "geyser" or jet of hot vapour, as it issued from the soil, there were built small reservoirs of rough masonry jointed with clay. These were filled with hot water from the pools, and the action of the hot vapour churning the water soon brought it almost to boiling-point. At the end of twenty-four hours it was found that the water contained about one and a-half per cent. of acid. By means of a wooden pipe the water was conveyed into a second reservoir built round a second "geyser," where it was further enriched by acid. After being transferred into half-a-dozen different reservoirs built round different jets, the water was sent into a decanting tub or basin, where it deposited the earthy impurities held in suspension.

From the decanting basin the water is sent into special evaporators. These evaporators consist of long wide sheets of undulated lead, two hundred and fifty feet in length and eight feet wide, turned up at each side. These leaden sheets are placed on an incline, and the acid-charged waters trickle slowly over the wavy sheets of lead, which are heated by hot steam-pipes passing underneath, evaporating under the action of the heat and depositing the boracic acid. The hot steam is derived directly from the natural vapour underground, and for this purpose separate artesian borings are made to a distance of one hundred feet or so underground.

Departmental Notes

The Braille Room

WE heartily congratulate the following officers and men on having passed their Tests:—

Writing Test: A. P. Archibald, F. Ashworth, H. Nievens, C. Thompson, E. James, W. D. John, H. Vickers, H. Jubbs, Lieut. E. L. Parry, C. J. R. Reddish, E. A. Steel, A. Thompson, H. W. Whitham, J. Scally, W. A. Underwood, A. Vander Bosch, J. B. Dixon, G. Smith, and A. V. Sowter.

Reading Test: S. R. Dyer, S. W. Johnson, W. Trott, Lieut. H. Irish, C. Williams, C. A. Hancock, V. A. T. Guthrie, F. L. Green, A. Bennett, J. H. New, G. W. Francis, G. Thomas, and S. Wright.

The National Library for the Blind are delighted to welcome the ninety St. Dunstanners who have joined this year, and are requesting them to send in lists of the books they would like to read, in order to ensure their being supplied with what they really want. It is not possible for the circulating staff to know what members have read in the past, and a request for one, or even two, books is frequently of no value, as the books requested may be out at the time. A fairly long list kept on file for each reader does away with this difficulty, so will all St. Dunstanners please send along their want lists.

Owing to the fact that the Library catalogue is now under revision, and there are at present no copies available, it would be advisable to send the want lists to Miss Pain at the Braille Room, so that she can cross off the names of those books that are not yet transcribed into Braille; or should any one care to give her an idea of the books they have read and liked, she will send them suggestions of various kinds from which to choose. This scheme has worked excellently in the case of many St. Dunstanners who have recently left.

Just a word about the books that have been taken home for the holidays. Will everyone please bring them back to the Braille Room when finished with. It has been noticed in the past that some volumes have a way of returning in safety to the various annexes, where they remain until the periodical raid is made to recover them.

Netting

NOW is the time to get going with the gardening netting, as there is sure to be a great demand for this during the coming spring months. With regard to fruit nets, home workers would be well advised to commence making the width of several nets, and leave these unfinished until definite orders as to length are secured.

A good standard width for such nets is 6ft., but our experience goes to show that every scrap of fruit netting of whatever size finds a ready market. The tanned twine we have been using has proved very satisfactory, as the nets made of this material do not require tarring.

G. H. W.

Shorthand, Typewriting and Telephony

CORPORAL J. MCINTOSH, who during the past eighteen months has rendered the most valuable services as an instructor in Braille shorthand, has left St. Dunstan's, having secured a post in Manchester. We are sure that his co-workers and those who have benefited so much by his tuition, join with us in wishing him every success in the New Year. Mr. Phillips, who will be remembered by many of the men, has succeeded to the post vacated by McIntosh.

The men who have passed their test during the last twelve months have maintained a very high standard of efficiency. We feel sure they will be the first to acknowledge that their success could not have been obtained so quickly without the practical ability and sympathetic interest shown by their teachers.

We congratulate the following men on having passed their test:—S. W. Batchelor, F. Green, T. Clark, A. W. Burnett, R. W. Swinnerton, G. Foster, R. Riddle, G. V. E. Watson, Mr. Rattray, J. Muir, R. Harding, H. Bates, J. R. McPherson, V. Guthrie, J. Jolly, E. Woodward, J. H. Barfield, F. Hyde, E. Boden, W. Simons, Marion Smith, R. Adams, J. Genet.

Corrections.—In the December number A. H. Rogers should have read A. G. Rogers, and D. Griffee should have read F. Griffee.

E. McL.

Massage

AT the December examination, held at Queen's Square, the following massage students satisfied the Examiners of the Incorporated Society of Trained Masseuses and Masseurs as to their knowledge of anatomy, physiology, pathology applying to massage, the necessary manipulations and the handling and care of patients. Each student passed the test, and will, in due course, receive his I.S.T.M. Certificate. W. L. Collins, F. Gibbins, S. Nixon, W. H. J. Oxenham, T. ap Rhys, M. Robinson, S. J. Spedding, L. E. Turner, and F. Winter. (The above names are in alphabetical order, the actual placings in the pass-list not yet having been published.) It is a source of gratification to record that no blinded soldier masseur has yet failed to obtain his certificate; from every hospital at which St. Dunstanners have been working we have heard nothing but good reports.

At the conclusion of the term, on December 9th, the students in training held a very successful subscription tea

and dance. The tea was held in the massage class-rooms, and the dance in the Outer Lounge. The students invited lady friends, and about seventy people were present. The whole of the arrangements and the preparation of the rooms were carried out by the students and the massage teaching staff during the afternoon. Messrs. Selfridge supplied the tea and refreshments, and three of their lady assistants very kindly volunteered to attend to the catering; their cheerful and expert assistance greatly added to the success of the evening.

In order to be right up to date, a "Jazz" band was engaged, and played during tea and right through the dance programme with great energy and "vim." Encores were in great demand. Lieut. Millard interposed a couple of numbers in the programme. His first song went with remarkable swing, and in response to an encore he sang "Oh! it's quiet down here." Possibly there was more than a suspicion of sarcasm in the choice of this song as applied to St. Dunstan's at Christmas time!

Mrs. Brighurst and the massage staff offer their sincere congratulations to the successful exam. students, and wish them and also all members of the present classes every prosperity during the coming year.

F. G. B.

ON the 1st January a revised list of mat prices was sent out to all mat-makers. Owing to a clerical error the size of a No. 2 Mat was stated as being 27" x 15", whereas it should be 27" x 16". This notice is inserted in case some of the circulars may have gone astray in the post.

Will any man who has not received this circular kindly communicate with Captain Fraser at once?

DRILL SERGEANT (in early eighties, after worrying the recruit for two hours): "Right about face."

RECRUIT (perfectly immovable): "Thank the Lord, I'm right about something at last."

Church and Catholic Chapel Notes

Church Notes

ON the last Sunday before the Christmas holidays the choir, ably assisted by the organist, Mr. Kingston-Stewart, held an excellent carol service, which was enjoyed by a large congregation.

The carols were sung again in the Lounge of the Bungalow Annexe on the Tuesday evening following, with equal success. Miss Bald kindly accompanied, in the absence of Mr. Kingston-Stewart. The policy of relying only on St. Dunstan's men for our choir has again justified itself, and the splendid work of the choir members deserves all praise.

It is gratifying to be able to state, with regard to the services, that the attendances have increased during the year, and, allowing for the increase in numbers at St. Dunstan's, the average has gone up in proportion to the average of 1917.

Newcomers at St. Dunstan's are earnestly asked to attend at the Church whenever an opportunity occurs for prayer, and also, if possible, to join the choir.

Notices relating to Church matters are displayed every week in each of the Annexes.

Catholic Chapel Notes

Brigadier-General the Rt. Rev. W. L. Keatinge, C.M.G., Bishop of H.M. Catholic Forces, paid his long-promised visit to St. Dunstan's on Friday, 13th December, the occasion being the first anniversary of the opening of the present Chapel. His Lordship arrived early in the afternoon and was shown round St. Dunstan's. He greatly admired the work done in the workshops and classrooms, and the splendid fortitude of all St. Dunstanners.

At 5.30 he gave, in the Chapel, a short address and Pontifical Benediction of the

Blessed Sacrament, afterwards holding an informal reception in the Braille Room.

Father Hanifin, of St. Charles', Ogle Street, W., acted as his chaplain, and several priests from neighbouring churches assisted in the service.

I take this opportunity of wishing you all a Happy New Year, and trust that all the Catholics of St. Dunstan's will fulfil their religious obligations, thus showing how they appreciate the blessing of a Catholic Chapel at the Hostel.

P. H.

Births

J. RENNIE, daughter - - Dec. 6, 1918
C. GRIFFIN, son - - - - Dec. 23, 1918
T. BAKER, son - - - - Dec. 31, 1918
F. MORRIS, son - - - - Jan. 6, 1919

Marriages

ON Wednesday, November 27th, D. Marshall was married at Leaton Church, to Miss G. V. Perry.

On Saturday, December 21st, W. Cox was married at the Church of Our Lady, St. John's Wood, to Mrs. A. L. Stack.

On Saturday, December 21st, W. Payne was married at Whittersham, to Miss F. C. Catt.

On Saturday, December 21st, G. A. Sugden was married at St. Marylebone Parish Church, to Miss E. Munkenbeck.

On Wednesday, December 25th, J. W. Whitham was married to Miss L. Dunkerley.

On Wednesday, December 25th, G. F. Payne was married at Royston, to Miss S. J. Clarke.

On Thursday, December 26th, A. Osmond was married at St. Lawrence Church, Hawkhurst, to Miss R. E. Boyden.

Country Life Section

Poultry Hints

TOWARDS the end of this month some sittings of eggs from the heavy varieties should be put down under broody hens so that early pullets can be hatched and reared to provide autumn and winter layers for the end of the year. With a very little extra care it will be found quite possible to secure satisfactory results. The breeding birds, which should have been mated up at least two weeks before eggs are saved, should be in the pink of condition, comfortably housed, moderately well fed (but not in any way fat), and with not more than six to eight hens to the cockerel.

In order to prevent the eggs from becoming frosted in cold weather, they should be collected soon after being laid and placed in a box or basket containing a little soft material. They should be kept in a moderately warm place until a sitting has been saved. As eggs may be scarce, do not wait a fortnight to get a full nest—better results will generally be won from eggs under a week old than from older ones, and at this time of the year, owing to the probabilities of frost, eight eggs will be ample, even with a good-sized and feathery broody hen. As soon as eggs are plentiful enough put down two or three hens at a time, as this saves much trouble later on.

Place the sitting box in a quiet, sheltered place, free from draughts, rats, etc., and shape the nest slightly concave, so that the hen does not roll any eggs from her in turning about. When the hen is off the nest at feeding times do not allow the eggs to become chilled. When the chicks are hatched they must not be exposed to draughts. Dry cold will never hurt them providing they have a nice clean coop to go into, but dampness, very possibly combined with a biting cold ground draught, will prove deadly. Do not coddle the chicks unnecessarily, but provide a shelter for them in case of rough weather.

J. P.

Goat-keeping

THE following interesting letter on the subject of goat-keeping has been received from Lieut. D. J. M. Stephens. The Country Life Section at St. Dunstan's have a supply of excellent hand-books on this subject, and they will send to any St. Dunstan's farmer who is desirous of further information, a copy, together with the pamphlet mentioned in our correspondent's letter:—

"Goat-keeping is not only a very profitable hobby, but also a very delightful one. The goats can be kept for next to nothing, and they will readily eat up all spare cabbage leaves; in fact, any garden scraps are enjoyed provided everything that is offered the goats is scrupulously clean. Where goats are in full milk (which is generally from February or March to July), they should yield in the case of a young nanny about a quart per day, and in the case of a matured nanny, at least half a gallon per day, and this, as can be imagined in these days of milk shortage, is a great help to the larder as well as effecting a considerable reduction in the milkman's bill. The milk is of far greater nutritive value than cow's milk, is quite free from tubercula or other undesirable germs, and has not the bad flavour it is alleged to have by some people who are either prejudiced or are ignorant of the subject. The price of goats is on the upward grade, but an ordinary young nanny should be purchased for £3 or thereabouts; a pedigree animal would, of course, cost a great deal more, but the price in each case varies like most things which are not 'controlled.' There is an excellent pamphlet on goat-keeping published by the Board of Agriculture, which can be had free on application, and I should strongly advise any intending goat-keepers to apply for it. I should be delighted to furnish any further particulars which may be required, to any St. Dunstan's farmer who is interested in the subject."

Sports Club Notes

PHYSICAL TRAINING.

THE Physical Training exercises are now in full swing. Both the Bungalow Annexe and the House have very fine squads, and it is hoped that the College Annexe and Cornwall Terrace Annexe will form Squads after the Christmas holidays. It is hoped that all those who intend to take an active part in the coming contests and also all the members of the respective Tug-of-war teams will commence training at once and join these squads at 7 a.m. each morning (excepting Mondays). It has been arranged that an Instructor from the Scots Guards—with the C.O.'s very kind permission—shall come up and help Mr. Gray, our St. Dunstan's instructor. Kits are provided for each man who joins, and Cups and Medals will be provided for the squad which wins the championship. Those who join these classes will not regret it, for they will be fitter for their work and for whatever branch of sport they may take up.

Physical training should be practised by everyone, and more so by a blind man, as very often the only exercise he gets is walking to and from work. This is not enough; if the organs of the body do not get exercise the mind becomes depressed and one feels sleepy and is always taking medicine. Half-an-hour's exercise every morning does away with unnecessary doctor's bills—it makes one feel fit and ready and creates self-confidence.

TUG-OF-WAR.

The weather being so bad and the ground so impossible for pulls, it was decided at a meeting held on Monday the 9th of December (the captain of each team being present), to postpone the League until after the holidays, when it is hoped that we shall get some better weather.

It was also suggested at the meeting that there should be light-weight teams from each Annexe and that they should be termed the second division. There are

several men who are very keen on the tug-of-war and cannot pull owing to the fact that they are under weight. At the next meeting we hope to remedy this by acting upon the suggestion made and forming a second division of the Tug-of-War League.

In future a meeting will be held in the Sports House every Monday at 1.45 p.m., consisting of a representative of each team, and it is hoped that all members of tug-of-war teams and of the Rowing Club—for we are going to form a committee in the coming term—will put forth to their representative members at these meetings any suggestions they would like to make.

We take this opportunity of thanking the Sports Sisters and Captains for their keenness in keeping the various teams together.

All the members of the House teams visited the Palladium on Monday, December 10th, and thoroughly enjoyed themselves. The Bungalow Annexe teams paid a similar visit on December 17th, and I am arranging for the remainder of the teams to go after the Christmas holidays.

THE "PEARSON" TUG-OF-WAR CHALLENGE CUP.

One team from each Annexe can enter for this competition. The draws for the same resulted as follows:—House *v.* College Annexe; Bungalow Annexe *v.* Cornwall Terrace Annexe. The semi-final will take place at 12 o'clock on Thursday, January 23rd, and the final at 12 o'clock on Thursday, January 30th.

ROWING.

Congratulations to the men who made the British Empire Championship such a success. The next races will take place about the middle of February, and will comprise single-sculling and pair-oars.

It has been suggested that we should carry out Putting the Shot and Jumping Competitions. Notices regarding these events will be sent out after the holidays.

R. H. F.

Found—A Dog

BY ARNOLD GOLSWORTHY.

AS Mr. Chorley came out of his suburban railway station his eye fell sympathetically on a lame dog. It was a wild-looking creature, the product apparently of several breeds, in which, however, the Irish terrier predominated. It was the kind of dog which you expect to see careering down the street with a tomato-can decoration to its tail.

The dog looked as if it hadn't had a meal for weeks. And as Mr. Chorley passed it he gave it a pat on the head and told it to cheer up. Then he went on his way feeling he had done a good action. And it hadn't cost him anything, either.

Mr. Chorley walked on. Presently he looked back and found that the dog was following him. So he quickened his steps, as a dog like that was really not a suitable companion for a respectable suburban resident. When he had gone some distance he looked back again. The dog had broken into a steady trot.

Mr. Chorley felt that he was being imposed upon. The next time he turned and saw the dog behind him, he picked up a stone and threw it as a gentle reminder that this nonsense had gone far enough. The stone missed the dog by about fifteen feet, but it made the animal hesitate. Mr. Chorley could have sworn he saw it put one of its front paws to its mouth to hide a faint smile of amusement at his weak marksmanship. He shook his fist at it a little angrily and turned into his front garden.

Mr. and Mrs. Chorley had just sat down to dinner when a series of pitiful groans reached their ears. Mrs. Chorley solved the mystery at once.

"It's a ghost," she said.

"A ghost your grandmother!" exclaimed Mr. Chorley, asserting his superior opinion. "It's that dog."

"What dog?" inquired Mrs. Chorley.

"Why the brute that followed me home," explained Mr. Chorley. "I'll give it a bone and send it away."

Mr. Chorley went and opened the street door. The dog stood up as if to show its respect for his presence, and then had a paroxysm of coughing in order to win his sympathy. Consequently, Mr. Chorley gave it two bones and some biscuits, and then told it gently, but no less firmly, that if it didn't go away after it had finished dining it would be kicked off the premises.

The dog listened attentively, and at the conclusion of Mr. Chorley's remarks it wept copiously. Mr. Chorley was not man enough to bear this touching scene, and he came inside and shut the door. Dinner was over when Mary Ann burst into the room.

"Please, ma'am," she said, "there's a strange dog got into the front garden, and 'e's scratching all the paint off the front door with 'is clawses!"

"Pshaw!" said Mrs. Chorley, getting up in a hurry, and addressing herself to her husband. "That's you, Henry, all over, encouraging strange dogs to the place by giving them food. I'll go out and pack off the brute in double quick time."

Mrs. Chorley was a little mistaken, however. The square meal had made a new dog of the stranger. The soft, tearful look had gone from its eye and in its place was a glare which can only adequately be described as saucy. As Mrs. Chorley opened the door the dog stood and looked at her warily as if to hint that any attempt to take liberties with it would be unwise.

"Shoo, shoo!" exclaimed Mrs. Chorley impatiently. "Go away, go away!" And as she spoke she made a sweeping motion with her hand indicating any spot between here and eternity. The dog cocked its head on one side and gave a significant growl. Mrs. Chorley promptly slammed the door and came back to the dining-room.

"You'll have to go and see to the brute yourself, Henry. Kick it out and shut the gate so that it can't come back."

Mr. Chorley, smiling a little at his wife's helplessness, and at the thought of his own superior tact in these matters, went out to

the scene of the trouble. Directly the dog saw him it barked for joy and danced round him in wild delight. Mr. Chorley, not displeased at this manifestation of gratitude, stooped to give it a friendly pat. Then recognising the value of diplomacy in these matters, he walked down the front garden into the road, intending, as soon as the dog had followed that far, to dart back and close the gate on it for ever.

The dog, however, had evidently met diplomatists before. It trotted behind Mr. Chorley with the air of a faithful retainer of long-tried devotion, but as soon as the gate was opened it ran back to the doorstep and curled itself up and began to sob like a child. Mr. Chorley came back to the house. In closing the street door behind him he was just a fraction of a second too late. The faithful retainer slipped in with a yap of hilarious joy and bit a piece out of Mr. Chorley's slipper in his transports of gratitude.

"We've often thought of keeping a dog, Amelia!" began Mr. Chorley suggestively, as his wife appeared.

"Yes, but not a mongrel like that," retorted Mrs. Chorley with a sniff of contempt. "Where—where's it got to now?"

"I think it ran past you into the dining-room," said Chorley, faintly, in the tone of one apprehensive of disaster.

Mrs. Chorley rushed in with a cry of horror. The dog was on the table with one foot in a dish of stewed pears and another in the custard, while its head was buried in the apple-tart, and the pleasant sighs and gurglings the brute gave vent to as it wolfed its way through the pie-crust clearly intimated that it was having the time of its life and didn't care who knew it.

"The brute!" cried Mrs. Chorley. And as she spoke she gave the dog a thump on the back that must have interfered with its digestion most annoyingly. It gave a threatening growl and snapped as Mrs. Chorley drew her hand away just in time. Not, however, in time enough to save the lace on her sleeve from the brute's teeth. It ripped off about a foot of it, and then deliberately sat down and ate it at leisure, apparently under the impression that the dainty material was a new kind of food. Then Mr. Chorley had a happy thought.

He snatched up the apple-pie and went out with it into the back garden.

"Come along!" he cried invitingly. "Good dog, good dog."

The good dog went unsuspectingly, and the garden doors were closed on it. Having, however, by that time eaten all it required for the moment, it only made a feeble protest, and then lay down under the evergreens and cried itself to sleep.

"In the morning," said Mr. Chorley, "I'll go and fetch a policeman."

When Mr. Chorley came down in the morning, the strange dog was having its breakfast on the lawn. One of the younger fowls had imprudently crawled out of the run to investigate the new arrival and was now being itself investigated at leisure. Mr. Chorley in desperation snatched up a garden fork; but seeing the wild look in his opponent's eye, he ran into the front garden.

The dog followed. It kept behind Mr. Chorley all the time, gripping his coat-tails in his teeth. Mr. Chorley then hoisted the white flag. He screamed for help.

A rough-looking man put his head over the garden gate. "Blowed if it ain't old Tiger!" he said. "'Ere, Tiger!"

The dog at once coughed up the fragment of Mr. Chorley's coat-tail and cleared the gate at a bound.

"Nice goins on, ain't they?" said the rough-looking man, shaking a warning finger at Mr. Chorley. "Tryin' to steal a pore bloke's dog, was yer? I've been looking for 'im all over the place, never dreaming as what somebody 'ad gon 'an pinched 'im. This 'ere's a job for the police, guv'nor, that's what this 'ere is!"

"The—the—dog followed me home," spluttered Mr. Chorley.

"Yus, guv'nor, I know all about that. Tain't the first time I've 'ad a dog stoled, and they all says the same. If its worth a quid to you to shut my mouth, we'll call it quits. If it ain't, well, the police station is just round the corner."

Mr. Chorley handed over the "quid" with a sigh of relief. And then, as "men were deceivers ever," he came back and told Mrs. Chorley that he had kicked the brute down the road, so that they weren't likely to be troubled with it again.

Flying in Flames

[The following is an extract from an exciting article by Cecil Hammersley, reprinted by kind permission of the Editor of *The Captain*.]

"FIRE in the air is the greatest dread of an airman's life. Take the following account of a nose-dive in flames from a height of 10,000 feet—nearly two miles—as an instance of the awful experiences that sometimes come the way of our R.A.F. pilots and observers. The observer who, with his pilot, experienced the ghastliness of this flaming nose-dive, told his adventure in the following words:

"We were on an Offensive Patrol between A—and Y—and our stunt had taken us about four miles over the German lines. Suddenly, out of the clouds right behind us, appeared a formation of twelve Albatross scouts. Soon, at a height of 10,000 feet, my pilot and I were actively engaged with one Albatross. We exchanged a stream of bullets, and seeing the formidable formation we were up against, my pilot did a lot of stunting—turns, side-slips and tail-slides.

"But this Albatross scout proved a quicker machine than ours, and our particular Hun got right on our tail. He peppered our tank with machine-gun bullets and, on account of the pressure in the tank, the petrol was squirted all over the machine, which soon caught fire.

"My pilot promptly struck her nose down, engine full on, for the short time she lasted. This particular type of machine is a "Pusher," with the engine behind and the petrol tank under the pilot's seat. So you can imagine the pilot's situation, sitting right on this tank, which was squirting flaming petrol in streams backwards, throwing the liquid all over the plane. For that reason the flames would not burn either pilot or observer until they actually ate their way into the framework.

"The first thing that came into our minds, naturally, was to get down as quickly as possible, so we continued our headlong, hurtling nose-dive, making a speed of close on 150 miles an hour.

When we were about 6,000 feet above the earth my pilot shouted to me, "Let's jump, Bill!" He was naturally much hotter than I, and his leather coat was all ablaze. But seeing our front line of trenches I naturally pointed to them. It looked as though we must be killed, and the pilot was wondering which would be quicker—to jump or wait for more flames.

"Then I managed to get the fire-extinguisher playing on the pilot, keeping the flames from his face and hands as much as possible, while he retained his hold on the joy-stick.

"The fire-extinguisher soon lost its usefulness, and the fire burned its way down through the nacelle. The floor of the nacelle, or cockpit, burned away and broke through, letting the three Lewis guns and the ammunition fall through.

"I fell through, too, but caught hold of the rail round the nacelle, and pulled myself back and up, perching on the side of the cockpit.

"We were now at less than 2,000 feet, and still descending amid the licking flames at a fierce pace. My pilot still managed to retain some control of what remained of our machine.

"When we got to about 600 feet our engine fell out, but we still hung on, clinging to the framework. The last thing I remember is seeing men running with stretchers towards the spot we were likely to hit. I guess my pilot fainted a few seconds before I did, but he had flattened out so that we must have "pan-caked" from something less than 100 feet.

"I awoke next morning at B—Hospital and found that I had a fractured ankle and burns on body and face. I discovered my pilot in the next bed—a ghastly sight, swathed in bandages. He had burns all over, and a bit of a hole in his body where the joy-stick hit him on landing. But there we both were, with plenty of kick left in us, and you can bet your life I did not strafe him regarding the precise quality of his landing."

Military Blunders

THE sergeants of the German Army give exact orders to the men. Preceding a total eclipse of the sun, an officer in charge of a regiment, wishing to explain it to his men, sent for his sergeants and said to them:—

"There will be an eclipse of the sun to-morrow. The regiment will be drawn up on the parade ground if the day is fine. If it should be cloudy the men will meet me in the drill shed as usual."

The sergeants then drew up their order: "To-morrow morning, by order of the Colonel, there will be an eclipse of the sun. The regiment will assemble on the parade ground, when the Colonel will inspect the eclipse. If the day is cloudy the eclipse will take place in the drill shed."

The proposition once made that the U.S. Home Guard should not leave home except in case of invasion, equals the story of the Bungtown Riflemen, an Ohio military company, whose bye-laws consisted of two sections:

Article First—This company shall be known as the Bungtown Riflemen.

Article Second—In case of war this company shall immediately disband.

Drill Sergeant: "Now, then, Cassidy, what is th' F-i-r-r-s-t movement in 'bout tur-r-r-n?"

Cassidy: "Whin the command is given yez advance the roight fut three inches ter the rear."

A very literal Scotch N.C.O. was one day in charge of a guard at Gibraltar, when one of his sentries fell down a precipice and was killed. He made no mention of the accident in his guard report, leaving the addendum, "Nothing extraordinary since guard-mounting" standing without qualification. Some hours after, the Colonel came to demand explanation. "You say in your report 'Nothing extraordinary since guard-mounting,' when one

of your sentries fell down a precipice four hundred feet and was killed!"

"Well, sir," replied Sandy, "I dinna think there's anything extraordinary in that. If he had fallen doon a precipice four hundred feet high, and ha' no been killed, I should ha' thocht it extraordinary, and put it doon in my report."

An Irish-American sentry was on guard duty for the first time. As an officer approached he shouted—

"Halt! Who goes there?"

"Friend."

"Advance, friend; give the counter-sign."

"I haven't the countersign; and if I had, the demand for it at this time and place is very strange and unusual."

"An' by the Howly Moses ye don't pass this way at all, be jabers, till ye say 'Bunker Hill,'" was Pat's reply.

The officer, appreciating the situation, advanced and cautiously whispered the necessary words.

"Right. Pass on." And the wide-awake sentry resumed his beat.

Two gallant Highlanders, discharged from the Army through wounds, were celebrating with a "wee taste of whiskey" when one, suddenly raising his glass, exclaimed—

"Here's to the guid old Regiment; the last in the field and the fir-r-st to leave it."

"Tut-tut, mon," replied the other, "ye dinna mean that, Ye mean 'Here's to the gallant regiment—equal to none.'"

An Irish leader was cheering his men on to battle. "Men," he said, "we are on the verge of battle, and I want to ask ye before ye start, will yez fight or will yez run?"

"We will," they replied.

"Which will yez do?" he asked:

"We will not," they replied,

"Aha, thank ye me men—I thought yez would."

Encounters with U-boats

THE appearance on the Thames at Westminster of two captured U-boats aroused much interest and curiosity. One of these submarines was moored by the Westminster Bridge landing-stage, and the deck, which was well out of the water, was crowded with inquisitive sight-seers.

An ugly looking weapon was this evil craft. Her length was about 100 feet, and from the centre, where the breadth was roughly twenty feet, she tapered down to a fine point in the hull. In the centre rose the conning-tower—a gaunt structure built in three tiers—and out of this rose the two thin telescopic periscopes which constitute the eyes of the submarine when submerged. In front of the conning-tower a fairly large gun is mounted, which can quickly vanish through a trap-door in the deck when the submarine submerges. The torpedo tubes are placed on each side of the conning-tower. In front of the hull is mounted a saw-edged piece of steel, which is intended to cut through the hull of any vessel which may be rammed. The whole U-boat is painted a dull grey, and one can imagine the difficulty which was often experienced in quickly spotting her.

One naturally wishes to know how these U-boats were captured, and although all the methods employed by our Navy have not been revealed, yet several very interesting accounts of combats with enemy submarines have been issued at various times by the Admiralty.

It has been stated that there is no sovereign remedy against the U-boats. Depth charges have frequently brought about disablement and surrender, and, in other cases, ramming or the smart use of bombs has brought about the desired result. Secondly, examples are given in which enemy submarines have been destroyed but their crews saved. Next, there are cases in which the destruction of the boat was equally certain, but

circumstances permitted the rescue of only a few survivors.

A fourth class comprises attacks on submarines in which the attacking vessel had to look to her own safety, and could not wait to bring confirmatory evidence. In other cases again, in which there was no such urgency to leave the spot, all that could be observed was oil and floating debris, and air bubbles on the surface.

Finally, there is the very numerous class of combats which could only have resulted in damage to the U-boats. These combats are not to be lightly passed over as ineffective, for through them many valuable ships, cargoes, and precious lives were saved, and in many instances the submarines may have sustained damage which would put them out of commission for some time.

Undoubtedly, the most satisfactory outcome of a submarine encounter is for the boat to be captured with all her crew. There have been very few instances of this kind published, owing to the policy of the Admiralty not to issue information concerning the fate of a U-boat when the enemy were without means of knowing what had become of her or the precise method by which she met her fate. There was, however, the case of U.C. 5, which was exhibited in the Thames in 1917, after her capture off the East Coast.

The various accounts of combats with U-boats which now follow are taken from an article by the Naval correspondent of *The Times*, which appeared in the *Christmas London Magazine*:—

"Depth charges are possibly the submarine's greatest peril. These were primarily concerned in the destruction of U.C. 39, a new mine-laying submarine. According to an account of this incident, which was received from a reliable Dutch source, this boat was engaged in the congenial task of sinking a merchant ship, and had opened fire on her possible

victim, when the ubiquitous British destroyer put in an appearance. U.C. 39, therefore, dived, but not quickly enough to avoid a depth charge which was hurled from the destroyer. The effect was to shatter the hull severely and to start leaks in the conning-tower and elsewhere. With the water pouring down and the frightened crew getting out of hand there was nothing to do but to bring the boat to the surface. Here the destroyer was waiting for her, and as the submarine continued to forge ahead a few rounds were fired before she stopped and surrendered. By this time her captain had been killed and other members of the crew wounded, but seventeen survivors, who cried "Kamerad!" were rescued, and with them, happily, were two British prisoners.

"An incident revealed by the Admiralty records in October, 1917, showed that a patrol ship accompanying a British oiler on one occasion rammed a submarine at full speed abaft the conning-tower, the boat rolling completely over. A violent explosion followed, and the submarine vanished. The sea was boiling with foam, in the midst of which immense air bubbles rushed to the surface for several minutes. Two men were seen struggling in the water, and life-buoys were flung to them, but only one man had the strength to grasp and cling to the buoy. He was rescued and brought back to the harbour. His companion sank before a boat could reach him.

"An incident recently related was that of a British submarine which sighted the double periscopes of an enemy craft some distance away to port, and made full speed for them, hoping to ram before the U-boat could dive sufficiently to evade the attack. The British boat achieved this object, and her stem cut through the plates of the enemy and remained embedded. Then followed an anxious few minutes, in which both craft endeavoured to extricate themselves, and the German, by using his ballast-tanks, came almost to the surface, bringing our craft with him. During the next minute and a half the U boat drew away from her, apparently in great difficulty, and

evidently making frantic efforts to keep afloat. Once his periscopes and conning-tower came up in such a position as to show that he was very much down by the bows and with a nasty list to starboard. At length the U-boat went under, but whether to her doom or to creep back crippled to port remained in doubt.

"The U-boat has many deadly enemies, not the least of whom are the airmen. In the matter of observation the airman is often better situated than the seaman, for it is possible to spot a submarine from the air, even if she be submerged a considerable depth. It is then simply a question of dropping bombs and depth charges."

The Fern

SOME talk about the heather hills
That rise above Loch Earn,
And some of Scotia's mountain rills,
But I prefer the fern.

The leek, the Welshman's national flower,
At table you'll discern,
'Tis true that we can not devour
Our beautiful tree-fern.

The English well may speak with pride
About their beauteous rose,
But I prefer a steep hill-side,
Whereon the tree-fern grows.

The shamrock is a pretty flower,
As all who look may see,
Well may it be Old Ireland's dower,
The tree-fern still for me.

The Waratah, a lily rare,
May be Australia's pride,
Our tree-fern grows without compare
Upon each mountain side.

The maple leaf may raise its head
In that land of the free,
But even they at times have said
Our fern's a beauteous tree.

And when we're nearly down and out,
This lesson let us learn,
To put out leaves and freshly sprout
Just like New Zealand's Fern.

"Third Reserve."

Food, Soap and Munitions

[Extracts from an interesting article on Army By-Products, reprinted by kind permission of the Editor of *Answers*.]

IN the summer of 1916 a definite movement was inaugurated to conserve and control Army food consumption, but most of all to put a check on the hideous waste that was sacrificing tons of supplies each year.

"Since the kitchen was the root of the food wastage evil, it became the goal of a great offensive. All the Army cooks were put under the microscope and carefully analysed, for they looked upon Government food as something devised for waste.

"The only way to get efficient cooks was to train them, so schools of cookery were started, where a course of instruction lasting four weeks turns the novice into a full-fledged Army cook, and teaches him to reduce waste.

"As long ago as 1915, England realised that she was paying an excessive price for glycerine, which is one of the essentials in the making of high explosives. The soapmakers in the United Kingdom notified the Government that, owing to the abnormal price for glycerine—it was £250 a ton against the pre-war price of £50 a ton—the American soapmakers were in a position to sell their product abroad at a price with which the British manufacturers could not compete.

"In order to understand the connection between soap making and glycerine (from which nitro-glycerine is made) you must first know that animal fat produces soap. One of the by-products of soap-making, in turn, is the much-needed and now highly-prized glycerine. One hundred pounds of fat produces ten pounds of glycerine. Before the war, and when there was only a normal demand for high explosives, glycerine had to be content to occupy a place in the industrial catalogue as a mere by-product. Since the war the tail wags the dog, and glycerine is as rare and almost as precious as gold.

"The Government at once got busy and

decided to collect all the fat from the Army camps, and use it for the double purpose of producing British-made soap and British glycerine for British shells.

"An agreement was entered into between the Army, the Government and the soapmakers. The Army agreed to turn over all the by-products of camp and kitchen to the soapmakers, and the soapmakers, on their part, undertook to supply the Ministry of Munitions with all the glycerine extracted from the fat at the pre-war price of £50 a ton.

"Now began the great mobilisation of waste products. It was easier said than done; in thousands of camps the grease and bones were dumped out every day, and it was obvious that all this litter could not be conveyed en masse to England. However, this operation was overcome by the invention of an apparatus known as the Ellis Field Fat-Extracting Plant, which was designed by Captain Ellis, a chemist in the Royal Army Medical Corps. In this process the rough fat and bones collected from the camps are treated in boiling-tanks, through which super-heated steam is passed. The fat is run out, put into kegs, and despatched to England.

"These field fat-extracting plants are as busy as they are smelly. Every now and then big Army motor-lorries rattle up with a load of garbage. All the leavings of the rendering plant, together with accumulated potato peelings, are sold to the French farmers for hog food.

"The conversion of actual meat refuse into fat for soap-making is only one phase of the utilisation of waste products. Bones compete with dripping in salvage importance. After all the fat is boiled out of the bones—one hundred pounds of bones produce ten pounds of fat—the remains are used for the manufacture of tooth and nail brushes, while the small pieces are crushed and sold for fertilising.

"Even the scraps from the soldiers' plates are utilised. When you go to an Army mess-hall you will observe that



Food, Soap and Munitions—continued.

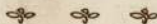
every soldier files out plate in hand. Outside the door he stops at a tub and scrapes all the leavings on the dish into it. These leavings are dried and chopped up for chicken food.

"Last year enough glycerine was obtained from Army fat to provide propellant for 18,000,000 eighteen-pound shells. This means that approximately 1,800 tons of glycerine were obtained from the refuse of the camp-kitchens.

"The gross income from the sale of by-products alone last year was £770,000. Add to this the saving in the cost of glycerine, and the value of the reduction in rations brought about by the supervision

of cooking and other economies, and you get a total saving estimated to be not less than £6,000,000. A larger phase of this conservation lies in the fact that it enabled a considerable amount of food to be released to the general public. At the same time the Army and Navy got all its soap free of charge."

Here you have one of the many sidelights on that growing self-efficiency of the Empire. The war has taught us many things, not the least of which is the need of utilising to the full the products of our Empire, and thus avoiding the importation of many commodities which hitherto had been obtained wholly from abroad.



Whale Meat !

WITH the encouragement and backing of the Food Administration of the United States, the Whale Supply Corporations operating on the North Pacific Ocean began placing the meat of the great mammal on their nearest cities last spring. It may now be stated that whale meat is being consumed, either in carcase, like beef, or canned, by the entire Northern and Western States.

The plants for its preparation, storage-houses for its keeping, and vessels for its distribution, are scattered along the North Pacific coast. There are eight whaling stations in active operation, belonging mostly to American and Canadian concerns. These stations have reported to date the capture of 659 whales in 1917, and are expected at the close of this season to have reached the 1,000-whale mark. The edible flesh of one whale equals in bulk that of 100 head of cattle, or 500 sheep. Whale-meat in its preparation is treated exactly the same as fresh fish; that is, after butchering, it is placed in ice in vessel holds, taken to railway ports, and forwarded over the country in refrigerator cars.

One of the best parts of the whale for eating is its heart. The heart of a large whale weighs about one and a half tons,

equal to, say, 300 to 600 hearts of a steer, according to size. A whale's tongue weighs upwards of 3,000 pounds. Although tougher than beef tongue, it is edible.

A whale is a mammal, not a fish. It produces its young alive, and suckles them the same as a cow. The whales are the largest animals that ever inhabited earth, but unlike other huge animals that formerly roamed on land or sea, they survived various terrible convulsions which destroyed their contemporaries by taking refuge in ocean abysses. Unlike fish, they breathe the only air of the atmosphere above them, and necessity compels them to rise frequently to the surface for air.

The flesh of the whale looks like that of beef, although admittedly a little coarser in texture, and it has a slight flavour of venison. Whale steaks and roast whale have been served in several of the leading New York restaurants for some time past. New York chefs have developed the best methods for cooking and serving, and have found that it yields to as many forms of preparation as beef. There is little to distinguish it from beef when served on the table, either in appearance, aroma, or taste. Many would be deceived into thinking it beef, if not told what had been served.—*Scientific American.*