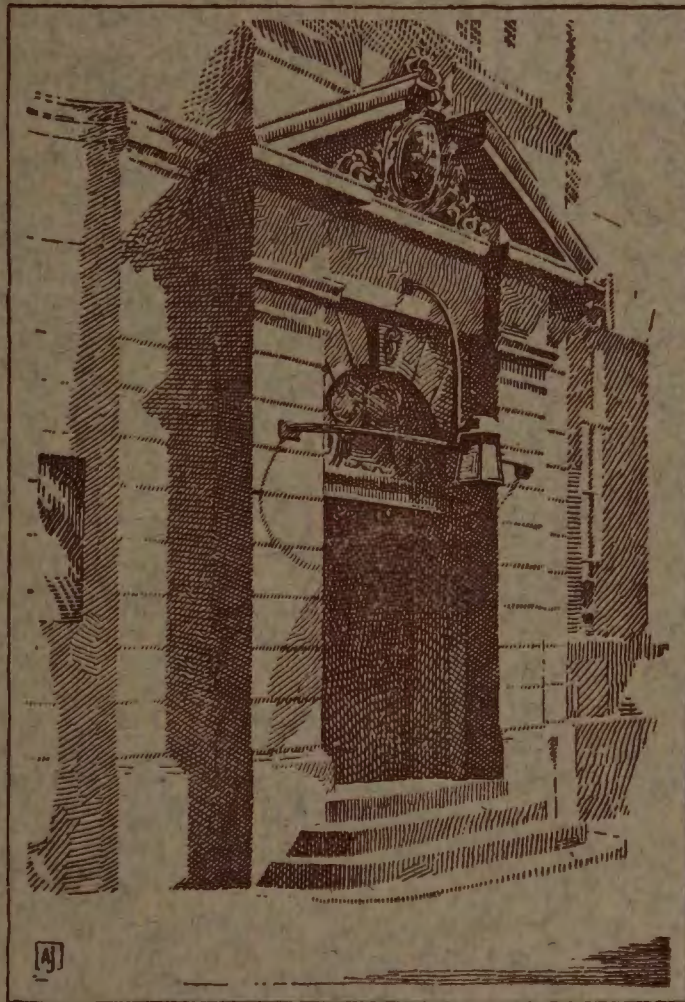


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The OPEN DOOR

For those who enter and those who leave



THE MAGAZINE OF THE
SWINBURNE TECHNICAL COLLEGE

PUB:8

Item 3(10)

THE OPEN DOOR

The Magazine of The Swinburne Technical College

Hawthorn, Victoria

"Crafty men condemn studies, simple men admire them, but wise men use them."

Office-Bearers of the College:

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COMMITTEE OF MANAGEMENT, "THE OPEN DOOR."

Editor and Manager: H. Brunskill.

Mrs. Clark, E. Edwards, D. McKay, S. W. Tompkins.

Hon. Treasurer and Sales Manager: F. W. M. Wood.

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Contributions may bear a "nom-de-plume," but the actual name of the contributor must be disclosed

THOSE DAYS OF LONG AGO

W. N. KERNOT, Esq., M.Mech.E., M.Inst.C.E.,
Professor-Elect, Faculty of Engineering,
Melbourne University.

Has it ever flashed through your mind that once upon a time, not so long ago, the Swinburne Technical College was non-existent; nay, further, there was not a Technical College in Victoria; but whether you have thought of it or not, it is nevertheless true.

Before the introduction of Technical Schools, how did a boy or girl learn a trade or equip himself or herself for his or her life's work?

Fifty years ago there was not so much to be learnt in the sciences and arts as there is now. Try to imagine no telephones, no electric light or power, no incandescent gas mantles, no gas engines, no motor cars, no X-rays, no wireless, no gramophones, no aeroplanes, and, above all, no picture shows.

In those days iron was used for all structures, as mild steel was expensive and rare, cement a comparatively new thing, reinforced concrete not heard of. And oxy-acetylene or electric welding beyond the dreams of the engineer.

However, in spite of the absence of so many things now regarded as essential, people lived and enjoyed themselves, and were as a matter of fact quite as happy or possibly happier than they are at the present time.

Everyone who knows anything of the history of technical education must have the greatest respect for the Hon. Francis Ormond, who on his own initiative and with little or no encouragement visualised our technical schools in a desire "to help those who show a willingness to help themselves."

Ormond built better than he thought, for the response, when once classes were started, was far greater than he or anyone else expected. Instruction was commenced in evening classes, and practically at once 1000 students enrolled. How this number was handled in the small building available is more than I could ever understand.

After several years of uphill work, the Government of Victoria took an active part in the scheme, and schools sprang up in many suburbs, and extended throughout the State.

Let me ask a question. How did we learn a

trade or profession without the help of the technical school? And let me answer it by asking another. Do you know that the harder a thing is to do, the greater will be its value to you when it is done?

There was no spoon-feeding in the "days of long ago," and the result was a hardy race of hand and brain workers, who, you know, paved the way to the relatively easy path of knowledge now available to everyone.

The effort used in acquiring information develops the mind far more than following the not unusual method of letting the other fellow do the thinking for you.

Any number of facts that we now take for granted had originally to be slowly and carefully worked out before being generally accepted.

All electrical students know Ohm's law, but how many know how it was worked out, and the difficulties Ohm had to overcome before he stated it. a little over a hundred years ago. And what is more, his contemporaries considered his "law" absurd and ridiculous for a long time after its discovery.

If you were told that a man lying on the floor could have a solid brick wall built up all over him to a height of fifteen feet and not be crushed, would you believe it? You are saying even now that it is silly, but the scientists of "days of long ago" had to believe and teach to the world that the atmosphere exerts a pressure and puts a load on each of us equal to this.

We now say that the pressure equalizes all through the body, but it must have taken great courage to announce this law, and run the risk of being regarded as a lunatic.

Not long ago, a high authority stated, when appealed to for help, that man would never fly, but we all know what has been done during the last twenty years in this direction.

Whither is all our knowledge leading us. Is it to good or ill. My answer is that it depends on how we use our wisdom to control and guide us in all our works.

HELP YOURSELF

By HAROLD W. CLAPP, Esq.
Chairman, Victorian Railways Commissioners.

One of the things that has fixed itself in my memory is a remark often made by my father: "Self-help," he used to say, "is the best investment I know. In the long run it pays more dividends than anything else." As I grew older, I knew better what he meant. One of the dividends is the respect and confidence of others; another is a sense of security in yourself.

My first introduction to self-help—to helping myself—was on my twenty-first birthday. A party was given to celebrate the occasion. It was also, as I discovered before the evening was over, to celebrate my setting out into the world. Next day my father, after discussing my future with me, said he had come to the conclusion that it was now time for me to gain experience for myself—to help myself. There was, he said, an opportunity for me to get down to realities in another State; he handed me a well-packed travelling bag and my steamer ticket, and wished me good luck, and off I went on my great adventure. I have since learned to appreciate to the full the kindness and wisdom underlying his action.

In the next few years, believe me, I had plenty of opportunities to practise self-help, and I know now that it was the best thing that could have happened to me.

After all, the education that you get in schools and colleges is no more than a means to self-help. Your teachers can do only their part—the biggest part is in your own hands. Self-reliance, trust in yourself, is something that you have to cultivate for yourself. Accumulation of knowledge, of course, is a wonderful asset, but much more is necessary. Many a man with the highest educational attainments has never been able to make use of them because he has not learned to stand on his own feet.

I suppose such men would be astonished if you were to say to them, "I'm sorry that you are so ill that you have to be taken care of." They would very likely reply, "Why, I'm feeling fine. There's nothing wrong with me." Yet, when you think of it, there isn't very much difference between

helplessness that arises from weakness of body and that which is caused by weakness of will.

There is no more interesting experience than to meet a man who by his own determination and his own effort—in other words, by practising self-help—has made something of himself. One of the greatest figures to-day in the commercial and financial life of Australia started his career as an apprentice. Abraham Lincoln commenced life in a log cabin; Napoleon Bonaparte was an obscure cadet; Thomas Edison made his start as a news-boy. These instances could be multiplied.

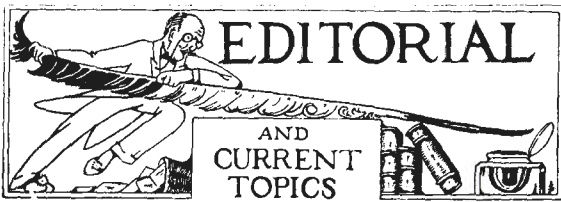
Behind the success of all these great persons lies a story of self-help that is quite as romantic as any stirring tale of adventure.

Some people when they hear of such instances are apt to shrug their shoulders and mention "luck." No doubt there is such a thing, but personally I have never known anyone who has really made good who has not gone more than half-way to meet "luck." It isn't "luck" to recognise and seize an opportunity, and it isn't "bad luck" if you miss it. It's either just sheer laziness or carelessness or, what is just as frequently the case, it is inability to help yourself.

Now, do not for one moment imagine that helping yourself means that you have no need for the help of others.. No one on this earth has a monopoly of brains or ideas. Actually every one of us is part of a big community team, and the members are all, to some extent, dependent upon one another. But, as in cricket, the fellow who can keep his own end up is helping the whole team, while the player who has never tried to learn the game has to be carried by the others. Self-help is the opposite of selfishness; it is a refusal to be dependent upon others.

It is worth practising, and you can't start too soon. Whether you are boy or girl, or man or woman, you have nothing to lose and everything to gain from self-help. It is an asset and an insurance. It is, I am convinced, the only direct road to success and happiness.

More than these, it is a badge of good citizenship.



We take this opportunity of heartily thanking Professor Kernot, Dean of the Engineering School, Melbourne University, and Mr. Harold Clapp, Chairman of the Railway Commissioners, for their very topical articles for this issue of the Magazine.

It is a striking coincidence that the key thought in both articles is the same; and one, perhaps, that may not appeal to the more youthful and less thoughtful members of our community—that the good things of life require personal effort. The articles will certainly answer the grumble of the student who, some while ago, declared that his teacher was “all right,” but in some ways didn’t know his job—because he was always getting the class to help him!

Howbeit, these contributions are very full of bright, stimulating thoughts, coming opportunely to inspire many a despondent but persistent worker who has been secretly wondering whether the monetary sacrifice was not just chasing an illusion. Let such a one preserve these articles for future comfort, and carry with them the thought that “man liveth not by bread alone.”

Coming Events.

Examinations commence November 16.

Carpentry and Contracting Social Evening, Monday, November 23.

Engineering Workshop Reunion in last week of November.

Engineering visit to Sydney, December 11.

End of Term, December 18.

Careful readers of this journal will have noted in recent issues letters from the pen of Mr. E. Hughes, of the Architectural Department, containing an earnest plea for definite social intercourse between the units of this College. We publish herein a reply from Mr. E. Marston, representing the viewpoint of the Old Engineering Students.

Acknowledgment is made to Waygood Otis (Aust.) for loan of block illustrating Vertical Transport; to Prestige Hosiery Ltd. for block dealing with Silk Stockings; and to Mr. W. Ackland for blocks relating to Stamps.

As there seem to be doubts in the minds of some, it is emphasised that, apart from special articles, this magazine is the work of students of this College.

NOTES BY THE DIRECTOR.

Changes in the College Council.

On account of the nature of his profession preventing attendance at meetings, Mr. Russell Martin has been obliged to resign his membership of the College Council, and his resignation was accepted at the August meeting with great regret. The vacancy has been filled by the election of Mr. Wm. Holmes, of the firm of Messrs. Parker & Bird.

Mr. Wm. Wishart, one of the representatives of the Kew City Council since the inception of the College, unfortunately failed to secure re-election to this municipality at the recent municipal elections, and consequently his seat as a representative of that City upon the College Council became vacant. The Kew City Council chose Cr. P. C. Edwards as their representative to fill the vacancy. Mr. Wishart has been associated with the College since its inception, being one of the first persons holding a public position whom the late Mr. Swinburne approached in reference to the establishment of the College.

Cr. H. Coleman, of Kew, having returned from his visit to the Old Country, took his seat again at the September meeting of the Council, and was welcomed by his colleagues.

At the Council Meeting in August, Cr. G. W. Simpson, of Hawthorn, was elected Vice-President of the College Council, and it is hoped that even in these difficult times he will have a happy term of office. Cr. Simpson's interest in the College is very real and practical. He was instrumental recently in obtaining a grant from the Minister of Sustenance, which enabled the whole of the exterior paintwork of the College buildings to be renewed, thereby greatly improving the general appearance of the institution.

Regret is felt at the serious turn in the illness of Mr. W. G. Burton, a very old and highly esteemed member of the College Council.

Changes in the Staff.

Mention was made in the last issue of the resignation of Miss V. Taylor, on account of her approaching marriage. Her place has been taken by Miss E. Dick, who has come to us from Kyabram.

Miss Jean Moreton has been granted leave of absence by the Council for the remainder of the year in order to take special studies in her Art work. In the meantime, her work is being carried on by Miss M. Blay, who comes to us from Ararat, and who was formerly one of the first students in the Girls' Junior Technical School, under Miss Blackmore, and also a student in our Art Department. We are pleased to have her back at the College.

Mr. F. Vize, of the Boys' Junior Technical School, reached the retiring age in May, and

EDITORIAL—continued.

finished his work at the College, after being on the staff for fifteen years, coming to us in the first instance from Echuca. He has been very much missed by his colleagues and by the students, as he was always a most earnest and conscientious instructor, and very much respected by all who came into contact with him. Presentations were made to him by his colleagues and by the students.

Mr. E. Cousins, Instructor in Art-metal work for many years, has been obliged, owing to health reasons, to give up work in metal, and has been transferred to Collingwood Technical School to engage in other work, and it is hoped the change will result in an improvement in his health. He was a very clever and capable craftsman. His place has been taken by the appointment of Mr. Kenneth, who comes to us from the Ballarat School of Mines.

Mr. L. T. Butler, part-time Instructor in Civil Engineering, Grade I., having been transferred to the Bendigo District by the Country Roads Board, has been obliged to resign. His position has been filled by the appointment of Mr. Roberts, who is also an engineer in the Country Roads Board.

A change has been made in the Instructor to the Bookkeeping Class, the place of Mr. Clark having been taken by Mr. T. F. Anderson.

Old students of the Girls' Junior School will be very pleased to learn that, as a result of her operations, the health of Miss Eyles has very much improved of late.

Retirement—Mr. McKay.

At the end of the year, the College will be deprived of the further services of Mr. D. McKay, who has filled the position of Headmaster of the Boys' Junior Technical School since its inception in 1913, as one of the first schools of its kind in the State, and his retirement will be a great loss to the College, and to the Boys' Junior Technical School in particular; his place will be very hard to fill. Reference is made by departmental officers in their recent report upon the Boys' Junior Technical School to the part which has been played by Mr. McKay during the last eighteen years in the success of the Junior Technical School at Swinburne, many hundreds of boys having passed through his hands into the industrial life of the State. The very good name that the junior day section of the school has, and the high opinions of it held by the parents and citizens of a large district are largely due to the fine influence exerted by him upon the staff and pupils, by his unfailing courtesy, and to his helpful and sympathetic guidance. We all regret very much indeed that Mr. McKay, who is due to retire at the end of this year, is to sever his active connexion with the work which he has advanced and carried out so successfully.

ART SCHOOL NOTES**THE ART EXHIBITION.**

The best thing that has ever happened in this School was the Art Exhibition, held there from August 25 to September 2. This happy idea on the part of the Art Master, Mr. S. W. Tompkins, brought himself, his staff and students together in a mass effort, and, by doing so, promoted a healthy spirit of comradeship, especially noticeable during the process of the exhibition, when the Third and Fourth Year students voluntarily gave up their holidays.

Arranged over the two floors and passages of the Art building, the exhibits comprised a very wide range of work, from elementary drawings to advanced advertising studies, such as posters, show-cards, fashion drawings, black and white and wash renderings. Life drawing, painting, applied perspective, cartooning and lino cuts were also shown. Pottery, clay modelling, and metal-work were allotted special sections. To quote one critic, "In quality as well as quantity, the exhibits were full of interest. Modern lay-out in advertisement was a feature."

The impression left by a first visit was a pleasurable mental indigestion, as if one had passed before the whole gamut of artistic endeavour. It was the usual thing to hear visitors say, or, if you were wearing a smock, to be told by visitors that they could not possibly take it all in in one visit, and would come again, also that they had enjoyed themselves very much. Hundreds of such (five to six hundred at a moderate estimate) visited the exhibition daily. The art critics were delighted. The Director of Education, Mr. Hansen, in his opening address to a large audience, stated that it was the finest exhibition of its kind he had ever seen. The Art Inspector, Mr. Dean, expressed the opinion that it was one of the finest of its kind ever seen in Victoria. Official praise could go no further.

Finally, we come to the more far-reaching effects of this exhibition. Mr. Dean stressed the fact that art is a vital need in the life of a nation. From a utilitarian standpoint, as culturally and aesthetically, art is related to life; art touches life at all points. It follows that to spare no cost in providing the best possible schools for young artists is incumbent upon all citizens. The exhibition showed the Swinburne Art School to the public as one of the chief assets of the State. Therefore, it has brought very strongly before the public the value of and necessity for supporting the best art schools. This, in itself, is a great achievement. Without doubt, the Swinburne Art Exhibition is a purple patch in the School's history.

—Nancy Lewes, Art School.

ART SCHOOL NOTES (*continued*)**FURTHER NOTES ON THE EXHIBITION.**

Sad story of the diligent student who, after lengthy explanation on the process of reproduction, was asked, "But why are there two of them?"

Student still suffering from shock of finding that she had tentatively explained elementaries to an "old identity" of the College.

Our noble "Faun" gently rebuked for lack of "trousers."

Student: "These are called bleach-outs."

Visitor: "Oh, I suppose you have to wait for the sunny days for that."

Student: "This is a pen and ink sketch."

Visitor: "Oh, did somebody do that?"

The Same Visitor (later): "Did they buy the pots, or make them themselves?"

The Same Visitor (later still): "But where do you all sit?"

Overheard:—

"Just look at the detail on that!"

"But why do they want to paint tomato sauce bottles?"

The Inquisitive Type:—

"What sort of a toothbrush?"

"But what is the gas above there for?"

"What do you want a library for?"

"Have you got any cookery exhibits here?"

"How many stairs are there?"

"Why is there so much printing on it?"

—J.H., Art School.

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ART COMPETITIONS.

When we finish the competition we are at present engaged on for the Lord Mayor's Appeal Fund—a competition specially arranged for Swinburne Art students only, as encouragement to them after their fine efforts in producing such an excellent display of posters in their recent exhibition—we will commence working for the Wiltshire's Poster, and Wiltshire's Black and White competitions. (We work very hard in the Art Department.) (This is obvious.—E., O.D.)

Recent Successes.—In the Advertising Arts Ball Poster Competition, open to all students in the State, Betty Ratten won the first prize, and had her drawing reproduced. Other prize winners were Ronald Renn (Second Prize), Audrey Tyson and Jessie Miller. In the International Gala Poster Competition, again open to all schools, Arthur Trumble won the first prize.

—N.L.

ART STUDENTS' ANNUAL DANCE.

The Annual Dance held in the Masonic Hall on July 23 was a great success. The hall was gaily decorated with coloured streamers, and posters done by the students. A novel attraction was a large box of balloons suspended from the ceiling, which were released during the evening.

Among the dancers were the Director of the College (Mr. Green), and Mrs. Green, and members of the Committee, Misses Betty Ratten, Joan Biddlecomb, Edith Buchanan, Jean Rose and Ann Picken.

Others present were Misses J. Moreton, Ena Larkin, M. Cohen, Betty Stephens, Joy Waller, A. Tyson, F. Syme, Nancy Elvins, Trixie Sutherland, Margaret Evans, Betty Cohen; Messrs. B. Calcutt, R. Chipper, J. Stafford.

Arrangements were supervised by the Secretary, Mr. Arthur Trumble.

—E.F.R.

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FOURTH YEAR NOTES.

The first breath of spring in the Ashburton Forest is not a subject for form notes, neither is the croaking of frogs in a big pool ringed by gradually ascending paddocks and hills, yet, what else am I, seated on a log in the forest by the pond, to write about? The doings of my fellow students? Nonsense. It is too far a cry to them from the first bluebell, the early lily and nanny-goats, bread and butter, eggs and bacon, and the scarlet pea in all its glory that I have just discovered. These early things are much fresher, if less important, than my fellow class-mates, who have left me the painful duty of writing about them. Well! I won't write about them. I will ignore them. They are so many phantoms in the background of this perfect spring day. Hurrah for spring!

I had forgotten one formidable factor—the editor. He will say we do not want literary vapourings: chronicle the doings of the class or find somebody else to do the job properly! There is no one else—the others have declined with scarcely polite thanks—so he will have to consider what I respectfully offer. For the benefit of those interested in the Fourth and Fifth Year's habits and morals, I will say that we are a class of student workers. Staff, please note! That means that we are able to combine study with a certain amount of pecuniary profit, or would be able to do so, were anybody, in these times of slack business, financial enough to buy our excellent examples of commercial art, fine art and craft work. Socially, we are the shining lights of the School, as witness the charming manner in which we pour each other tea, cocoa or coffee, made from the contents of an absentee's box. It is not intended to convey that our morals are lax; rather we have so many working late tea parties

ART SCHOOL NOTES (continued)

that supplies often run short. Anyhow, these mild depredations even themselves up in time. I can hear a chorus of "Oh! How dare you? We always return." But this chorus is less insistent than that of the frogs in the pond fringed with a yellow weed. Hurrah for nature in a generous mood!

—Nancy Lewes.

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LIMERICK.

There was young lady named Lee,
Who sat underneath a big tree,
Of the future she dreamed
When she suddenly screamed,
"Oh my! I've been stung by a bee!"
—P. Ryan.

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THIRD YEAR NOTES.

A simple judgment upon the general activities as the term opens might be pronounced as "anticipation with no mean effort." Third Year students find themselves confronted with a formidable and gratifying selection of interests.

Competitions submitted by visitors verify the success of the Exhibition, while the inevitable approach of yearly examinations divides our attentions. Contrary to our customary attitude, the prospect of so much diligent application has only deepened our enthusiasm, and fired our most placid members, as verified by sundry invasions into the night classes.

We regret the absence through illness of several of our number this term, and especially that of Trumble, who always makes his "long" presence felt in our midst.

—Betty Ratten.

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TO AN ENGINEER.

Monday morn, after nine,
Down the lane, friend of mine,
Hat awry,
Dashing tie,
Deuced luck! Another fine!

—A.P.

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SECOND YEAR NOTES.

"Happy is the nation that has no history," explains our situation. We have little history to chronicle, apart from that which has happened as a result of our connections with the wider life of the Art School; but we have been happy, we are happy, and we intend to be happy.

We arrived at Swinburne after our well-earned holiday to find the Art department showing signs

of "the morning after the night before." It looked very dishevelled after "the scene of scenes." However, we did not regret quelling our artistic instincts for a day, and setting ourselves to manual labour. The Exhibition was well worth every ounce of energy that was put into it, both before and after, and its results will doubtless be an advantage to every present art student of the College. Whole-hearted co-operation was manifest in every detail. There was no competitive spirit, but instructors and students alike put their hearts and souls into the preparation to make one great combined effort. We felt very proud of our Art department during that time, and are proud to have played our part in that interesting display.

For the first week of the term, we missed the genial presence and the indispensable assistance of Mr. Jordan, and were glad to see him back amongst us. As for the students, there is little to relate. Some have greatness thrust upon them, while others are content to remain in obscurity, despite the noble works they produce. Betty Barnett was called upon to fill Miss Morton's place as Assistant Art Mistress in the Junior School for three weeks. Although we note that she has developed a marked seriousness of demeanour since the commencement of the experiment, we still feel that there is hope for the younger generation! Another of our members has proved herself so worthy that a member of the staff has earnestly advised her to display her talents from a soap box on the Domain. Perhaps when the posters for the Lord Mayor's October Appeal are judged, many more bright sparks will be brought to the fore. We realise more and more that Art means self expression, and are quite conscious that if we could fully express ourselves in our art, the watchful public would behold some weird and wonderful things. Perhaps it is just as well that our expression is subject to severe limitations!

—M. Grove, Art School.

To laugh all day,
To go my way,
Is all I ask.
To find my soul,
To know my whole,
Is all I wish.

—Alison Wannemacher, Art.

Why is the Third Year room like the "promised land?"

Because it is over Jordan.

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CLASS NOTES, FIRST YEAR.

Someone told me the other day that if I did not blow my own trumpet, no one else would (she is in a critical condition!). So I am carrying the idea still further, and blowing that of the First Years'.

ART SCHOOL NOTES (continued)

Personally, I think we could be worse, but not much—or so say the students who have to listen to us and the gramophone at lunch time. We can't help it if the record sounds like a rooster with adenoids (you can blame the male students for that!). We are calling for contributions for a new needle, as the one we have occasionally jumps the tracks with cheerful abandon, and for that reason we have had to scratch the name off the record. The Exhibition was an affair of great moment, and we were well represented, some of the brightest students having dozens of exhibits hung—or rather tacked—on the walls. Those who went to it had a great time at the Swinburne Dance; and so, not to be outdone, Betty and Anne, with Ralph's valuable help, organised another. It was not well patronized by the other years, who evidently felt too highbrow to appear in a school hall. I'm glad to say that they do not know what they missed, for if they did we would be pestered with pleas to hold another. This, however, cannot be, because work is becoming too strenuous. Since the Exhibition, I notice competitions pouring into Swinburne, some of which we are entering for, but the tests and examinations, though still far off, are pushing themselves into the forefront of our consciences, and causing some anxiety, among other things. We generally have a pretty fair attendance at the hikes, which are great fun, and though we occasionally do something out of the ordinary, we do not go so far as to plunge into muddy creeks, or make rude remarks about the people in front! We have done many other interesting things, but as I might get had up for libel if I relate them, I will leave them to your imagination, but remember "Honi soi qui mal y pense!"

—F. O'Connor, Art School.

**ANAGRAMS.**

In these anagrams the rhyming couplet refers to the hidden word. A test for the engineering students.

1. "SIT ON MINE, SIR," there is time,
Before the clock begins to chime.
2. "CAPER FOR MEN," make money for me,
You are what crowds come miles to see.
3. "MAC, IT'S TEA," I cried in glee,
Come and chew a chop with me..
4. "NO DIP SEAT, flying fast through space
Will get you safely to this place.
5. "I CRIB NOT + UNTO"
Is what I write for you.
6. "SEE, OUR HOST." He has food and wine.
His house is stocked with treasures fine.

(Answers on last page.)

THE FORUM

The Editor, "The Open Door."

Dear Sir,—

The question which Mr. Eric Hughes raised in your last issue—the possibility of co-operation between groups representing studentship in the different departments of the College—is not a new one; but nevertheless one which deserves the thought of all bodies purporting to owe their existence to a spirit engendered by the association with the College.

The Old Engineering Swinburnians, at various times, has given the matter consideration, and has arrived at the conclusion that the governing factor in the success of any co-operative effort on the lines suggested by Mr. Hughes, would be the compatibility between the members of the groups taking part.

The O.E.S. would welcome an opportunity to discuss with the Architects possible courses of action, and can see no reason why such an opportunity could not be provided in the immediate future.—Yours, etc.,

L. J. MARSTON, Hon. Sec., O.E.S.

ENGINEERING SCHOOL

ANNUAL SOCIAL AND REUNION.

This well-established feature of our social life was held on Thursday, August 27. In addition to staff and present students, a very representative group of old students were, as usual, present. Many of the older brigade, we noted with regret, were absent, notably S. R. Bell, the genial ex-secretary of the O.E.S. The items, much on the lines of last year, were very well received, a pleasing innovation being a well-conceived attempt at mystification by a late day student.

During the evening, the following awards were made:—O.E.S. Medals: R. H. Giltinan for Scholarship; A. A. Madigan, for Athletics. Machine Shop Prizes (for excellence in work): D. Crowley (Day), C. R. Taylor (Leaving). Sports Trophies: A. A. Madigan (Championship); R. Rolland (100 Yards and 220 Yards); R. Lewis (440 Yards and One Mile); L. Herbert (Hop, Step and Jump); J. Spears (Long Jump and Weight Putt); R. Giltinan (High Jump). The awards were made by Mr. F. Ellis, Principal of the Melbourne Technical School, as guest of the evening. Diplomas also awaited R. P. Begg, C. J. Hunter and E. E. R. Thomas, but they were all away on business.

ENGINEERING SCHOOL (continued)**THIRD YEAR FORM NOTES.**

The years 1929-31 having been the most noteworthy in the history of the Engineering School, we shudder to think of what fate is in store for this department in the years to come, when its mainspring—namely, the Third Year—leave it to its own resources.

The Civils being by name and repute, the most suited in the aforementioned third year to pen the notes of such an illustrious gathering, it is only appropriate that one of their number should be the author of their final literary epistle to honor the pages of this Magazine.

We regret to announce that our romantic "Spark" has not yet recovered from a certain disease, contracted during the earlier part of the year, which causes him to appear and to disappear at most unusual hours of the day, with quite a vacant look on his features, although the latter is not an unusual occurrence among the Electricals—they assume it with remarkable ease—it is much anxiety that the former is causing among both the staff and his keepers, the remaining two of the trio.

The future is being well looked after by the mechanical couple, "Greek God," and his right-hander, "Mademoiselle," who, having already started business in a small way, are going into partnership in a "Permanent Wave Salon," to be opened at Hexham; while we Civils have contemplated taking a course in motor mechanics.

If walls could but speak, what a tale the four enclosing Room 3 could relate. Was it not within its precincts that, one by one, the patriarchs of the Third Year were overwhelmed by the ubiquitous influenza that pervaded the city not so long ago, until only three of the thirteen—touch wood—remained; and it was whispered along the corridors "Abandon hope, all ye who enter here;" that we succeeded in depositing the germ from our headquarters, and turning it loose among the staff and First Year, with surprising results.

As this year is fast drawing to a close, and with it the end of our sojourn at Swinburne, I think that none of us, on looking back on the years he has spent at this seat of learning, can really regret that he came here, and has not benefited in at least one way or another.

Well, as the Editor will be wondering how much more space is to be wasted, I'll say "Au revoir."
—J. E. Henshelwood.

§

MECANEAT.

"However in the dickens is this 'ere problem done?"
"Now, what's the use of asking me?" comes back a mournful moan.
"Well, I just thought you might know how," replied the first one then.

"Ah, well, I don't, you silly dope. You'd better think again."

Five minutes later after striving hard to work it out,

The first one sat up in his seat, with an exultant shout.

Then Marston turned himself about to see what caused the row:

"Hello, George, is it you again? Well, what's the matter now?"

"The answer to that problem—Is it thirty three point four?"

"No! No! my boy, you're miles out: you'd better try once more."

"Well, now that you have all arrived, we'll do some work," said he.

"Now tell me what you know about Kinetic Energy."

A ghastly silence filled the room, and no one said a word.

Then suddenly, in awful wrath, the master's voice was heard.

"Come on, what are you thinking of, you silly lot of goats?"

"Twas only just a week ago you copied down the notes!"

What units is it measured in? Surely you know a bit!"

"It's measured in square feet, I think," yelled out some bright young wit.

"Well, seeing that it's hopeless to ask you any more,

"You'd better work out problems. I'll give you three or four."

At nine-fifteen, two students went their hats and coats to get.

"Hey, what are you two playing at? It's not nine-thirty yet."

"No, sir, but we are going now to catch the Croydon train."

"So that's your caper is it, you're at that game again?"

Alright; but you must hurry up, that train is almost due;

But mind you, you are missing an important thing or two."

Then fifteen minutes later, Mr. Marston said, "Alright,

It must be nearly time now, so we'll finish for to-night."

The class broke up, the lights went out, the students took to flight,

And forgot this awful subject till the next dread Thursday night.

—Percy.

§

FOOTBALL.

The end of football finds us with only four wins to our credit—a rather disappointing result, considering the talent at our disposal. There were

ENGINEERING SCHOOL (continued)

some redeeming features, however, one in particular being the splendid opposition put up by a weakened team against the strong Gordon Institute combination. There has appeared to be a lack of the proper spirit amongst the players this year, and this has contributed to many of our failures.

However, there have been some hard workers in the team, one of the outstanding being J. Derrick, who has given sterling service at full back. This player gave a fine exhibition in checking the Gordon Institute star forward. Others who have played some good games are Forbes, Lewis, Wishart, Rolland and Ledgerd. We are also indebted to Jack Endersbee for his assistance in some of our harder matches. There is some undoubted talent in the First and Second Year students, therefore a good team for next year is assured, and will, we hope, meet with greater success.

—A. G. Murray, Capt.

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SENIOR SCHOOL FOOTBALL, SEASON 1931.

- Swinburne, 7.5, lost to De La Salle, 9.11.
- Swinburne, 6.11, lost to De La Salle, 7.16.
- Swinburne, 16.16, defeated Malvern Grammar, 5.3.
- Swinburne, 6.6, lost to University H.S., 11.22.
- Swinburne, 2.7, lost to University H.S., 18.10.
- Swinburne, 7.17, defeated Footscray Technical, 6.8.
- Swinburne, 5.7, lost to Footscray Technical, 14.28.
- Swinburne, 3.2, lost to Melbourne H.S., 18.14.
- Swinburne, 4.8, lost to Melbourne H.S., 6.10.
- Swinburne, 11.6, defeated Melbourne Grammar, 10.9.
- Swinburne, 5.11, lost to Melbourne Grammar, 11.7.
- Swinburne, 4.11, lost to Xavier College, 11.5.
- Swinburne, 3.8, defeated Xavier College, 1.8.
- Swinburne, 5.8, lost to Gordon Institute Technical, 17.17.
- Swinburne, 9.3, lost to Gordon Institute Technical, 13.11.
- Swinburne, 5.8, lost to Wesley College, 6.6.
- Swinburne, 1.2, lost to Marist Bros., Kilmore, 19.30.

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CRICKET SEASON.

Football season having just been completed after having such a prosperous year, and gaining such a handsome cup, I am sure that the members of the cricket team will rise to the occasion, and try to land a cup equally as good as did the footballers. The victories of the football team were

mainly due to the splendid coaching they received from Mr. Potter, and secondly by their splendid team work. The cricket team should do equally as well as the football team, because they have two first-class coaches in Mr. Green and Mr. Tempe. The team consists of some very fine players, and having had the previous season's experience, should do great things this season. The school holds the top wrung of the ladder at the present time, and let us hope and try to hold this position to the end of the season.—Cheerio,

—Interested.

TECHNICAL SECTION.

MODERN VERTICAL TRANSPORT.

By J. R. Buchan.

Vertical transport, unlike horizontal transport, is more or less obscure from the general public so far as motive power is concerned.

We see the steam engine pulling a train of carriages along, and immediately we form our own idea about the pulling force.

The motor car engine is so well known that even an elementary school boy is able to pass remarks on its qualities.

With the electric lift, very little is known by the general public as to its operation, because quite a large number of people will say (when they see an artistically designed lift cage) what a lovely lift it is, and how expensive it must have been, little knowing that this part of the equipment on a modern lift represents anything from 2.5 per cent. to 3 per cent. of the total cost of the installation.

Now let us look at the equipment which represents the other 97 per cent. of the cost. Take for example the lift installations at the Hotel Alexander and A.P.A. Buildings. I have thoroughly examined these lifts and their operation, and have had the technicalities explained to me. They are of the gearless traction type, made by Waygood Otis (Aust.) Pty. Ltd.

These installations consist of a motor generator set, a winding motor with brake and rope sheaves, various controllers, and ball type governor.

The motor of the M.G. set is supplied with current from the City Council mains at 460 volts. The generator delivers current to the lift motor at a maximum pressure of 240 volts.

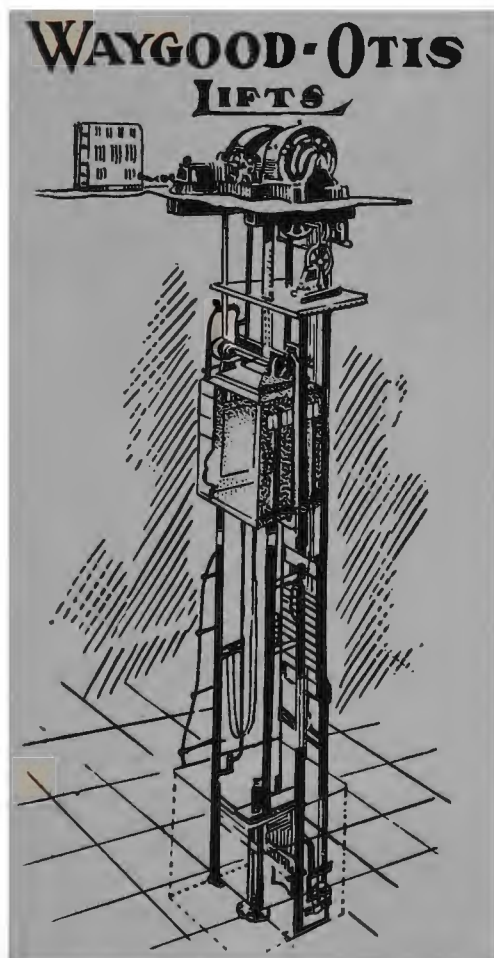
The lift motor runs at about 115 revs. per minute, and it is equipped with a commutator the diameter of which is about 1 ft. 6 in. On the other end of the armature shaft there is a grooved sheave over which pass the haulage ropes. Attached to this sheave is a large steel pulley, fitted with heavy brake shoes, which are held off while the lift is in motion by means of a large solenoid magnet, the braking of the lift being per-

TECHNICAL SECTION (*continued*)

formed by means of heavy compression springs pressing against the shoes.

The armature of the driving motor is about 2 ft. in diameter, but it has no starting resistance in series with it as have ordinary industrial motors, but it is started by means of a variation in the voltage from the generator of the M.G. set. This gives a very smooth acceleration and deceleration.

By means of remote control, the motor of the M.G. set can be started or stopped from the car as, for example, by merely entering the car and



pressing a button corresponding to the floor you wish to go to, the M.G. set will start up and supply the necessary current to the lift winding motor, which automatically starts winding the car to the floor corresponding to the button you have pressed, and will stop exactly level with the floor; then, if no other button is pressed within the next five minutes, the M.G. set will automatically switch itself off, therefore no current is wasted by a M.G. set running for long periods when nobody requires the use of the lift.

The ball governor is driven by a steel rope attached to the car by means of a clip. This rope passes over a rope sheave on the governor and over another sheave situated at the bottom of the lift shaft, and then attached to a winding drum on the safety gear under the car. Therefore, should the car overspeed through being overloaded or from any other cause, the balls of the governor will lift, thereby releasing a catch, which allows powerful jaws to grip the rope (which as mentioned above is attached to a winding drum on the safety gear under the car), thus unwinding the drum, which, in turn, unscrews a right and left hand screw, on the ends of which are powerful jaws which hold the car firmly on its guides until an engineer arrives to remove the cause of the overspeeding. This, however, is a very rare occurrence, but it ensures safety to the public.

The installations which I have mentioned are called "Gearless Traction Micro Drive Type," and are of the most modern design for high speed vertical transport. Slow speed lifts are usually of the geared type, which means that a worm shaft is coupled to the shaft of the winding motor, which revolves at a speed of 800 to 1200 r.p.m. This worm shaft engages with a suitable gear wheel attached to the driving sheave for reducing the speed of the lift, and is most suitable on low buildings where speed is of less importance.

I trust these remarks will be of some assistance to "Open Door" readers who have not had the opportunity of examining the mechanism of an electrically-operated lift.

**STAMP COLLECTING AS A HOBBY.**

By "Civilian."

Stamp collecting is a most interesting pastime, because of the many opportunities it affords for the study, in a most interesting way, of the many countries of the world which would otherwise be little thought of.

The origin of stamp collecting is said to be the work of a Belgian schoolmaster who, in the early fifties, hoping to make his geography lessons more



interesting, encouraged his pupils to collect stamps of the various countries and paste them on the pages of their atlases on which the countries appeared. This hobby, though not now practised

TECHNICAL SECTION (*continued*)

in this manner, shows no signs of dying out in the schoolboy of to-day.

As we grow up the hobby grows with us, and now we find collectors among every section of the community, from the greatest men in the world down to the poorest, for the King of England is a most ardent collector, and has a collection worth upwards of ten thousand pounds, also many American millionaires are very proud of their stamps.

From a very early period in the history of the hobby, its followers have been divided into two main classes—those who collected stamps and

examines them with his eagle eye, and mistakes are indicated on the proof. It is during this examination that "varieties" are detected and corrected.

The machinist then performs the work of "cutting the overlay," that is, to bring out the light and shade of the stamp, which greatly improves its general appearance.

When the previous work has been completed, the machinist "prepares his rollers," and sees that the ink flows smoothly so an even colour is obtained; then one ream (500 sheets) is placed on the feeding table of the machine, care being taken to see the water mark is the correct way up. Each operator signs a slip which follows the work



those who also studied them. The study of stamps, when devoted to the history and the methods of production, is known as philately.

The educational and artistic sense of a country might almost be read in its stamps, for important historical events and achievements are now recorded by a special printing or issue. For instance, in our country, the centenary of Western Australia and Sturt's exploration were commemorated by the issue of the Swan and Sturt stamps, while more recently Kingsford Smith's world flights were similarly honoured.

The machines used for printing stamps are similar to those used for fine art printing and specially strengthened for long running.

The sheet of stamps is printed from a plate which is made by assembling the required number of individual metal types or "electros," which are made from a single steel die. If a major flaw develops in the plate, it is a simple matter to unscrew and withdraw the defective type, and substitute a new one. A minor flaw is corrected by retouching or re-shaping the face of the type, a delicate process, which requires the hand of a master craftsman.

When the plate is ready, it is issued to the machinist, who eventually makes a "blind" impression, i.e., one without ink, on coloured paper; the weak places thus revealed are then interlaid under the plate with paper packing to give a uniform impression on all stamps.

Proof sheets are then sent to the engraver, who

through, and the number of sheets printed is automatically recorded and registered on a counter.

The sheets next pass on to one of the perforating machines, of which there are several types. This punches the lines of holes between the stamps to facilitate their separation. The size and gauge of the holes are those best suited to the quality of the paper.

The machinist may have much trouble with the effect of the weather on the paper, as hot north winds curl it up, and it is then almost impossible to get the paper through the perforating machine. In winter, the ink and plates are heated to ensure



evenness of colour, and every care is taken to maintain an even temperature in the printing house.

Every half hour the machinist takes a magnifying glass and examines the sheets for faults which may appear as the plates become worn. The sheets are then finally checked for all faults,

TECHNICAL SECTION (*continued*)

including perforation and incorrect water marks. The ordinary stamps of Australia are printed on water marked gummed paper, 480 to a sheet.

As regards the inks, the Postal Union Countries have adopted standard colours for similar charges, e.g., for ordinary letter rate, the stamps are red.

When our letter rate became 2d., a change in colour was necessary, the red colour being transformed from the 1½d. to the 2d. value. Thus the colours of stamps at different periods form a reliable record of the economic history of the nations.



The advantages of stamp collecting are many. Primarily, it is an interesting hobby and may be suited to the circumstances of the individual. It improves our knowledge of geography and history, and stimulates an interest in other countries and people. Pictorial stamps portray the prominent men of all nations, famous buildings and great works, as well as the animal and plant life of the various parts of the world.

The arrangement of a collection in an album demands orderliness, tidiness, neatness and care, and the hobby leads to the formation of valued friendships. Many advanced collectors specialise in a particular section, such as British Colonials, Australian Commonwealth, Australian States (old issues), Pacific Islands, air mails, etc. The beginner and general collector, however, take in the whole world, and as they feast their eyes on the stamps in their albums, fancy takes them on a journey to the uttermost ends of the earth.

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BUILDING A RAILWAY.

The first and main thing to be considered, before the railway is built, is its cost of construction, and the cost of working it when completed. To meet the cost of construction, it is first of all necessary to raise the money, and the people from whom it is borrowed will naturally desire to see some return on their investment. Therefore, the railway company must aim at making a profit sufficient to pay a dividend on this invested capital.

The more the money spent on the construction

of the line, the greater the burden of capital will be; so the engineer who does the planning must see to it that the cost of construction is kept down to a minimum; but on the other hand, the cost of working the line later on must be kept in view at the same time. By laying the rail way over the surface of the ground, with nothing much in the way of embankments, cuttings, viaducts or tunnels, it would be possible to make it very cheaply, but, by doing so, the gradients might be too steep to allow engines to work them, except with the lightest of loads.

In very mountainous country, such as the Alpine regions of Europe, the engineer has been forced to fight nature at an enormous cost, in order to lay lines which are only operated with difficulty on account of their tremendous gradients.

These, roughly, are the principles of railway planning.

When the line has been decided upon, then the question of the gradients, and what gradients are permissible in railway planning, has to be considered. As the steepness of the railway gradients increases, obviously the cost of working the line goes up at the same time, and in a considerably more rapid proportion, thus showing that the gradient plays an important part in the building and working of the railway.

Then again, the gauge must be decided upon. If the railway is to be run over very hilly and mountainous country, the narrow gauge is the most convenient, as much sharper curves are possible than on a broader gauge, and the railway is able to wind about the valleys, hugging the hill-sides and saving much in the cost of structural and excavation work. But if speed of transit and carrying capacity are needed, the narrow gauge, being light, would give place to the broader, which would have the greater necessary strength. If, however, the railway is of a uniform gauge throughout the country, the gauge would be made the same for convenience.

Next in order after the actual planning comes the work of construction. First of all the engineers survey the whole route, and set out the centre line with pegs at definite intervals. Meanwhile, unless it be some minor route which the company can construct itself, "tenders" are invited for the construction of the line, the lowest tenders usually being accepted, and if there is a considerable amount of work to be done, it may and probably will be divided between several contracting firms.

One of the most important points in planning the route is to see that the material excavated from the cuttings shall roughly balance that required to form the embankments, as the latter are chiefly formed by means of the spoil from the cuttings.

While the excavation and filling are in progress a commencement has also been made with the bridges. Where the railway is on an embank-

TECHNICAL SECTION (*continued*)

ment, the bridges under it are usually erected before the embankment has actually reached them, and they stand as lonely sentinels until the embankment is completed to formation level, on which the ballast and track are laid. At the same time, the stations "en route" are in course of erection, sidings and goods yards are laid out, and the signalling, etc., essentials of railway working, begin to make their appearance, the track having been laid as soon as each piece of cutting or embankment is completed.

Finally an inspector travels over the line, and thoroughly inspects it; every bridge, for example, is tested in order to see that the deflection of the girders is not excessive under the moving load; and much attention is paid to the signalling, in order to prove that every necessary precaution has been taken with regard to safe working.

If the result of the inspection is satisfactory, nothing further remains but to introduce the train service; and thus another is added to the network of lines covering the country.

—J. E. Henshelwood.

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THE PETROLEUM INDUSTRY IN AUSTRALIA.

By special request, the following article by Mr. Robert Treganowan (Managing Director of Ramsay & Treganowan Ltd.) has been written with a view of explaining the rapid strides the production and refining of crude oil in Australia has made.

The word petroleum derived its name from the Latin root *Petra-Oleum*, meaning rock oil, and, being a mineral, is therefore known as mineral oil, to distinguish it from other types of oil derived from animals, fish and vegetation, etc.

Prior to the first oil well, which was operated by Colonel Drake in 1859, the three last mentioned types of oil were used for all lubricating and illuminating uses, but it was not very long before science proved the superiority of mineral oils due chiefly to their freedom from acid, and as conditions changed, the oil industry progressed, and kept pace with the times.

Oil has been found in many countries, and, with the exception of America and Russia, the quantities have been small, and only sufficient to meet portion of the needs of the home consumption, while America and Russia have exported large quantities of their production to most other countries; America being by far the largest producer and exporter.

Oil is one of the most important and valuable minerals yet found, and without it we could not have our motors, aeroplanes, ships, trains, trams

and every other type of machinery so extensively used to-day throughout the whole of our industries, as lubrication is essential, the duty of the oil being to separate the moving parts, thus preventing friction, and although a film of oil is very thin, yet it is sufficient to prevent the metal surfaces rubbing against each other.

Australia is rich in shale, which is of higher oil content than most shales, yielding as high as 160 gallons to the ton. In the past, the cost of treating shale has been too high to compete with oil from America, but with the advantage of the present-day protection, this industry is being revived, and promises to be of great importance to Australia.

In Scotland, where wages are much lower than those existing in Australia, the shale, although only producing 20 gallons to the ton, has operated successfully for the past 70 years.

The existing financial depression in Australia would quickly vanish and be turned to prosperity so soon as the present production of crude oil is increased to the stage where the major portion of Australia's requirements can be supplied.

There is no doubt regarding the existence of oil in Australia, as we have already found it at Lakes Entrance, Gippsland, where it can be seen coming up in the pump from a level of about 1300 feet, and the oil has been proved to be equal in quality to that obtained in America.

If the Lakes Entrance oil field was situated in America, instead of Australia, sufficient money would be received overnight to put down 20 times as many pumps as are operating, merely because of the fact that Americans realise the value of petroleum—a fact we have yet to teach our own people.

Little is known by the average Australian of the enormous amount of geological survey work that has been and is being carried out in Australia to-day in searching for oil, and so confident are these people that oil will be struck that they are pegging out immense areas of land so that when the time is opportune they will not be at a disadvantage in having insufficient land to operate.

You have no doubt read in the newspapers of the new oil field discovered in New Zealand, and just as they have found oil, so will we in Australia, but we must be both patient and diligent, and in due course we will surely be rewarded for our labours.

When oil is found, it is sometimes difficult to cope with, especially when a gusher is located.

Oil is likened unto an underground lake or river, and, owing to its gaseous nature, is looking for an outlet, and when the drilling tool strikes through the rock or sands, the gas immediately rises, following the drill to the surface, and, in the event of a strong gas, it has been sufficient to blow the drill up, also the derrick which holds

TECHNICAL SECTION (continued)

the drill, this being termed a gusher; but in the majority of cases the drill locates the oil, and, with the aid of a bailer, oil is first obtained in small quantities, and in order to increase production, a pump is installed, and a steady flow may continue for months, or years, according to the nature of the well.

Refineries are seldom located at the fields where the oil is obtained, partly because of the uncertainty of supply, and also the fact that they would not be conveniently located to the source of distribution, therefore a refinery should be as central as possible, and on this account, many miles of pipe lines are laid in America to carry the crude oil to the different refineries, and pumping plants to operate these pipe lines are installed at various sections to hasten the flow of oil to the refinery.

When the crude oil reaches the refinery, it is placed in large storage tanks of varying capacities, from one million gallons to six and a half million gallons.

At Lakes Entrance, the crude oil is pumped from the well into storage tanks, from whence it gravitates to the dehydrating plant, where it is treated for moisture, which is extracted by means of heating and separating, and is then ready for filling into 40 gallon drums for shipment to the refinery of Ramsay & Treganowan Ltd., at Newport.

On arrival the oil is pumped direct from the drums into the large boiler still, and subjected to a process of distillation, which, briefly, is as follows:—

The crude oil is filled to the required level in the still, where ample room must be left for expansion. Heat is then applied by means of a fire at the bottom of the still, while inside the still is a perforated steam coil through which saturated steam is passed to aid distillation, and as the oil reaches boiling point it creates small bubbles which eventually break into the form of oil vapours and rise to the top of the still, where they find an outlet to the cooler atmosphere, and there become condensed, as the coils through which these oil vapours pass have a cold water circulation around them which hastens the condensation of the oil, and as it passes into a separator any moisture present immediately falls to the bottom of the tank, while the hot, dry oil remains at the top, and runs away down into the tanks which the operator desires to be filled.

This first product of distillation from the Lakes Entrance crude is called tractor distillate (heavy power kerosene), and as its petrol content is low, no effort is made to recover it, and the volatility of the tractor distillate is thereby improved. The distillate is known as "Ramtre Fuel Oil," and is supplied to the farmer at a lower price than American kerosene, and as it possesses more power than kerosene, it is a much more economical fuel for the farmer; thus it will be seen that the

discovery of oil at Lakes Entrance is proving of direct benefit to our primary producers.

After the completion of the first distillation, the remaining oil is pumped over into a coker still, which is vertical, and heat is applied in a similar manner, only at a greater intensity, and the heavier fractions are driven off in vapour form through the condensers, and after reaching the separator boxes the oil is directed into its respective storage containers according to its density.

This is known as distillate, and is pumped from storage into other tanks for chemical treatment, being first treated with sulphuric acid, and later with caustic soda to neutralise the acid.

The acid treatment is carried out with agitation by means of compressed air, the acid being fed through a finely perforated lead tube, and with this agitation the acid is thoroughly mixed through the oil. The effect of this treatment is to precipitate any tarry matter and hydro-carbons which sink to the bottom, leaving the clear, pure oil to be further treated, for which purpose it is pumped into another tank and washed with caustic soda in the same manner as previously described, and after allowing the oil to settle, the sludge is allowed to run off from the bottom, and, at the same time, a spray of water is played on the surface of the oil to ensure complete washing away of soda. As the oil is lighter than water, it constantly rises, while the water is passing down through the oil and running away by means of a tap at the bottom of the tank.

This oil is again pumped into the overhead feed tanks from where it gravitates into the coker stills for a further distillation, which passes through the same process and back into receivers, or tanks, prior to its second and final chemical treatment, when it is again subjected to distillation, and on this occasion, it passes through an aerial condenser which automatically separates the oil into three densities or viscosities, and gravitates to the storage tanks to be subjected to its final treatment, viz., the extraction of all traces of moisture by means of a centrifugal separator.

Before being filled into drums and tins for sale, samples are drawn at intervals and tested in the laboratory to see that the oil is neutral and up to standard quality.

It will be seen from the foregoing that three cycles are necessary before the finished oil is produced, and, in all cases, every care must be exercised by the operators to see that all phases of treatment are carried out in a proper manner, otherwise great damage could be done.

The directors of the South Australian Oil Wells Co. N.L. extend an invitation to visit their field, and arrangements can be made for a guide to explain the operations of the pumps and other plant to all interested, and they will also arrange for parties to visit the refinery of Messrs. Ramsay and Treganowan Ltd. at Newport, when the method of refining can be seen and explained.

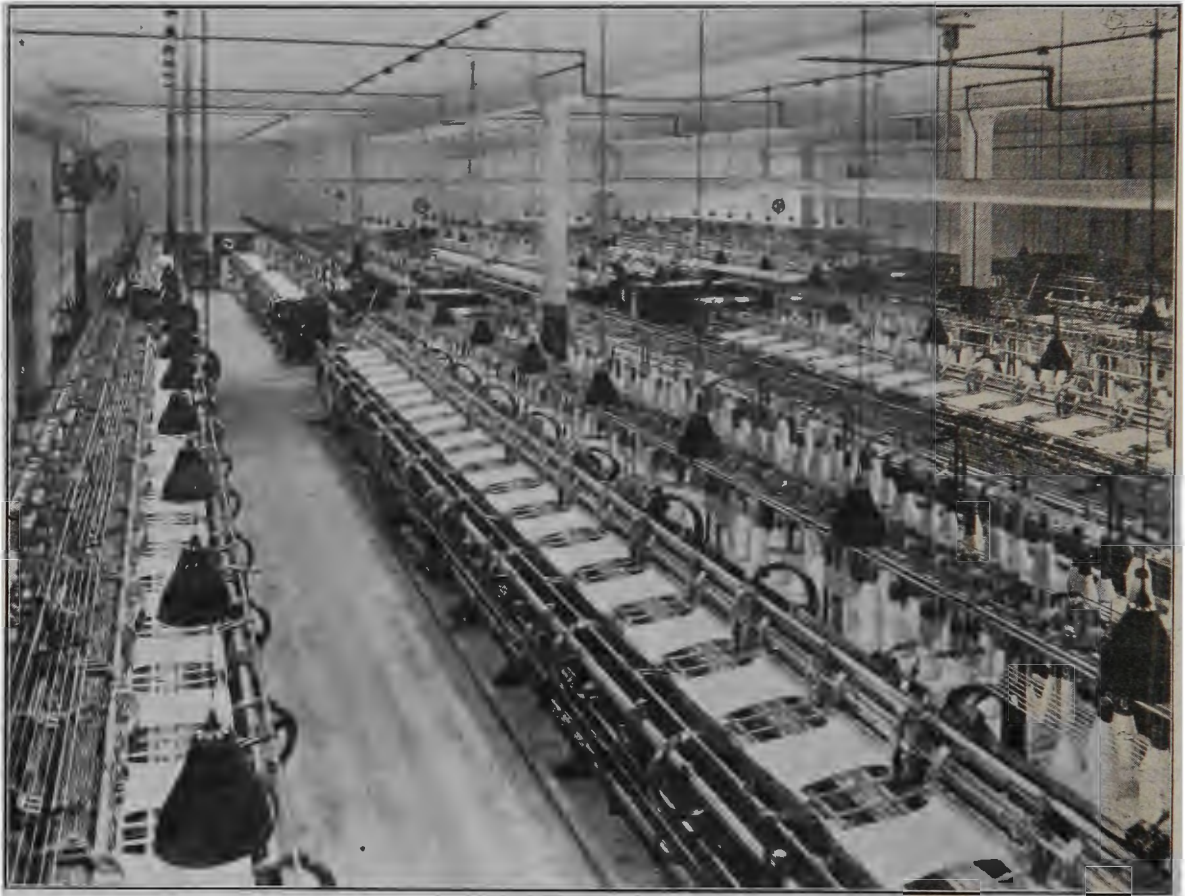
TECHNICAL SECTION (continued)**THE HOSIERY INDUSTRY IN AUSTRALIA.**

The hosiery industry is in its infancy in Australia, as it is only about 12 years since a group of optimists, calling themselves Prestige Ltd., started making stockings in a small factory in Brunswick.

After many set-backs, they finally conquered the prejudice against Australian-made goods. Now this concern is the largest hosiery mill in the Southern Hemisphere, having held its own against all opposition, which now has become very keen,

and now circular stockings are quickly going out of popularity, as the former are being made so cheaply. The circular machines are worth about £150. These machines are very simple to operate, one man and an assistant being able to attend to a large number. Each of these machines is able to produce up to nine stockings an hour. As the name implies, it is a circular process, the needles being of the latch type, and the whole stocking is made in the one piece, except for the toe, which is linked or joined afterwards. Also a mock seam is sewn to the finished article; the stocking is then dyed and pressed, as described later.

The full fashioned stocking undergoes a much



This Room is a section of one of the Full Fashioned Departments in the Prestige Mills.

many small mills having sprung up owing to the high tariff which was brought into operation at the end of 1929. This tariff was the means of increasing the number of Australians employed in the industry, but made competition keener.

There are two types of hosiery, full fashioned and circular knitted. It is only in recent years that full fashioned stockings have become popular,

more intricate operation than the one just described. As the machine alone is priced at over £2,000 in America, it costs over £3,000 to land in Australia, the extra £1,000 being for duty, freight, etc., and erection. Great difficulty was met at first in the setting up of these machines, as this was the first attempt of its kind in Australia. It was now found necessary to send an engineer to America for experience in the textile industry. On returning

TECHNICAL SECTION (continued)

from America, he undertook the erecting of the machines he bought when abroad, and of training Australians to become proficient in the operation of them. The machine itself consists of 20 to 24 heads, each producing one stocking, which is formed by the thread passing along a row of vertical needles made of spring wire, and hooked at the ends; the thread is pressed by the action of sinkers into loops about these needles, the loops of the previous row are then pushed over the closed beads or hooks, and thus over the ends of the needles, forming a continuous flat web of fabric.

The stocking is commenced by being knitted on all the needles, but finally narrows down (or shaped) to the form of the leg, until only about half the needles are being used. After the leg portion is finished, the stocking is then taken off this machine and put on one which knits the foot, there being one of these to three of the former, these forming a unit.

It is impossible to go into further detail, as the machines are so intricate that a practical demonstration is necessary to understand the delicate points of operation.

The next process is known as finishing. This includes seaming, and the linking of the toe and heel.

The stocking is then dyed, which was one of the great difficulties facing the manufacturer, as it was necessary to experiment to find the correct dyes to suit the fabric made in this climate. The stockings are placed in large vats, and thoroughly soaked with the dye, then being put into a hydro-extractor which tends to dry them.

The placing of them on aluminium steam shapes thoroughly dries and presses the article, which is then examined, folded and boxed all ready to be passed on to the public.

—D. Peacock.

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BUILDING AND CONTRACTING.**Lectures on Timber Seasoning.**

A series of three lectures on Timber Seasoning was given by members of the staff of the Forest Products Division of the Council for Scientific and Industrial Research. These lectures corrected many of our theories about timber.

The first lecture, which was given by Mr. I. H. Boas, was entitled, "The Growth of a Tree." Mr. Boas stated that to fully understand the properties of wood it is necessary to be familiar with its structure. Wood, unlike other structural materials, is honeycombed with cells. The vertical

growth of a tree is very rapid, and ceases early in the life of a tree, while the lateral growth is slow, but continues until maturity. The only actual living portions of a tree are the tip and a very thin layer of cells just inside the bark, called the cambium layer. These are the only parts of the trunk of a tree in actual growth. The growth of a tree is more rapid during spring and summer than during autumn and winter. It is this difference in the growth rate that produces the growth rings or annual rings. Timber is divided into two classes:—Hardwoods, i.e., trees with broad leaves; and Softwoods, i.e., coniferous or cone bearing trees, whose leaves are thin and needle-like. The names of the classes are misleading, as they are classed not according to their hardness but according to their structure.

Mr. S. C. Elliot, in the second lecture, dealt with the behaviour of a piece of timber during drying. Many have the erroneous idea that kiln seasoning kills the timber, while the natural method does not do so, for, as stated before, the cells of a tree are dead, except for the very thin cambium layer. The only difference between the two methods of seasoning is that in the kiln the temperature, humidity and quantity of air is controlled, whereas in the natural method we rely on the weather to control them. Sap is composed almost entirely of water with a small percentage of mineral salts, etc., in solution. All that seasoning consists of is the removal of this water. Care must be exercised during seasoning, otherwise the outer layers will become dry, while the centre still remains wet. This causes checking and other defects in timber. An absolutely dry piece of seasoned timber actually has a moisture content of from 10 to 12 per cent., depending on the humidity of the locality. The causes of collapse of Australian timbers and the re-conditioning by steam treatment were also fully explained.

The third lecture by Mr. A. Clarke explained the practical methods of seasoning. He stressed the importance of drainage, layout, and good circulation of air in a seasoning yard.

With the aid of the Engineers' lantern, attended to by Mr. Griffiths and C. Cornish, many illustrations were shown throughout the lectures.

Our Principal, Mr. F. W. Green, took the chair at each of these lectures, and introduced the lecturers.

A very gratifying attendance was noted, and representatives from many of the principal timber millers and building firms indicated that the lectures were much appreciated.

We feel very grateful to these gentlemen for coming along and giving us this very interesting series of lectures, and also to Mr. Cousland for affording us the opportunity of attending them.

A fourth lecture is, I believe, contemplated.

—Syd. Mac.

CATALOGUE OF CARPENTRY STUDENTS, 1930-31.

1. McNaughton, Sydney. — Known in all departments. He now spends several half days at the College. The remainder he probably spends in the home garden. He is the "star" of the football team forward line. He also hikes.

2. Wilson, Arthur J.—Now residing at his native town, Wonthaggi. A noted golfer, and winner of several trophies. Was the "ruck" in the football team, especially against Footscray, 1930. Composed the College war-cry, which was recognised by Mr. Page. He spent many peaceful moments in the carpentry shop.

3. Watson, Leo.—A S.T., who carries good weight as well as his leather bag. Ping pong keeps his weight from becoming excessive. Lo, Leo!

4. Hanke, William.—A youth who now lives on the farm. Has blown up many tree-stumps, as well as dogs. Spilt much water, and threw many bench brushes during his school days.

5. Slew, Frank.—Now an orchard manager. Was noted for his collective nature. As a singer, he had a good voice, but it had a rough passage.

6. Bail, James.—Quite a bashful youth, nevertheless, an ambitious one. When the next census is taken, Jim will probably win the leather medal for the most improved ping pong player. He once said that he had never taken a young lady out.

7. Winch, Stanley.—A ping pong stylist. Has an interest in all workshop happenings. Supplied the apple pie at the break-up banquet, 1930.

There are others, but as I am unable to give details, I will leave it to another present or past student to complete the catalogue.

S.H.G.U.H.

JOKES.

A boy took a position in an office where two different telephones were installed.

"Your wife would like to speak to you on the 'phone, sir," he told his employer.

"Which one?" inquired the boss, starting towards the two boxes.

"Please, sir, she didn't say, and I didn't know you had more than one."

Passenger: "I suppose you've had some narrow hair-breadth escapes during your seafaring career?"

Mate: "Rather. I was nearly drowned once."

Passenger: "You don't say so! How did it occur?"

Mate: "I went to sleep in the bath, and forgot to turn off the water."

—L.C.D.



APOLLO.

My love will come when music in
The springtime sways the flowers,
When glaucous smooth the valleys lie
And sleep in sunny hours.
The time I spent with him will be
Unnumbered as the seeds
That, blown by sprightly breezes, grow
To beautify the meads.
And I shall lie beneath the blue,
Enveloped in his song;
But strident clang the passing gang,
And fettered hours are long.

—Edith Buchanan.

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ABORIGINALITIES.

White Man (to native): "Hullo, Jupiter, who do all those children belong to?"

Jupiter: "Why, boss, they all belonga me, can't you tell by the colour?"

When the Coolgardie Goldfields (W.A.) had just been discovered, prospecting parties who went out from that point used the local aboriginals as rouseabouts on account of their bushcraft. Camels had recently been imported from India for use in this region, and when the blacks first saw them they were terrified and ran for their lives. The following story is told of one blackfellow who was taking advantage of a Sunday morning's rest to wash his trousers (the only article of clothing they ever wear) at a soak, when a camel made its way by instinct to the water. The abo. had never seen one before, and when he heard its approach, he looked round and saw its long neck right over him, and it is said he left the spot precipitately, and that his steps were no less than ten yards apart!

His boss found him later, hiding under his (the boss's) bunk in his tent, groaning as though he had been badly hurt. The following conversation took place:—

Boss: "What's the matter, Billy?"

Billy: "By crickey, boss! By crickey, boss!"

Boss: "Who been hurt 'im?"

Billy: "Nothing. Emu get down! By crickey, boss! Nothing. Kangaroo get down! Very near eat 'im up!"

ANALECTA (continued)

Aboriginals, as a rule, know very little about the meaning of numbers, as regards distances in miles between one place and another, or in any number of articles exceeding five. One, by the name of Jimmy, was taken on a duck-shooting party as guide and general handy-man, and when the party thought they should be nearing a certain lake, one of them asked, "How far lake now, Jimmy?"

Jimmy: "Might be one mile, might be three mile, might be far away, might be close up, by-em-bye get 'im."

Another day, Jimmy was asked how many sheep he had seen, and he said: "By crikey, boss, I see lot of sheep, must be thousand million, nearly fifty!"

—Anon, Art School.

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ONE LIFE: A BLOSSOM TREE.

Silence—save for proud ticking of an important-looking old clock, which looked absurdly dignified in such an obviously new room. But for that, one might almost have imagined that Time held his breath in that little house.

Presently a tired sigh called attention to a rather sedate looking woman, who was wearily knitting a small white booty. Five tiny pink toes peeped from a cradle near the worker, as if to claim their footgear.

With an excited buzzing, a fly came whisking through an open window, and alighted on one little toe, inspecting it with great curiosity. The tickling sensation thus produced caused the foot to disappear under cover, and the owner to stir to wakefulness. The fly promptly took flight through the window, and baby's wide, wondering eyes followed it out over the lawn to the summer-house beyond.

A breath of wind stirred some soft blue curtains, which were conspicuous in their newness. The child gazed at the latter, and, finding them interesting, forgot her fly. "Pretty bloo fings," her eyes seemed to say, till they discovered with amazement a spray of blossom poking its nodding head into the room. For fully three minutes, her gaze never faltered, then one chubby hand reached forth and closed over the delicate petals. Within another two minutes, baby's eyelashes swept her cheek, and the purr of contentment could be heard in her gentle snoring.

Softly the worker arose, tucked the warm blankets around the child and tip-toed from the room. Hush! Hush! ticked the clock—blossom—nodding! nodding!

* * *

Twelve years have passed. A long-legged girl of fourteen sits at a table, littered with text-books. The ticking of a clock and the gentle billowing of blue curtains seem familiar. Ah, I have it! A baby—blossom! Yes, there it is—a splash of white, dancing just outside the window: Ah! What a day! Sunshine, glorious sunshine!

The girl at the table painfully translates a French exercise, which must be finished before lunch. She detests French. The very scratch of her pen is a betrayal of her restlessness. With wistful eyes she gazes at her brother, David, and his friends, playing in the summer-house:

With sudden resolution, our young student flings down her pen, and marches to the window. Her intention is clear. She is determined to climb down the blossom tree. It is dangerous, but she will take the risk. Holding fast to the window-ledge, she makes a valiant effort to rest one leg on the nearest branch. David has seen her, and taunts her in her failures. Burning with a child's humiliation, she decides to make a jump for it. There is one horrified moment of suspense, a harsh splitting of timber, and a girl's body lies crumpled on the ground. David is standing motionless beside her, blossom showering on to his bowed head and shoulders—blossom, fluttering, fluttering! Children screaming, sobbing! Then the thud of feet rushing towards them over the lawn.

* * *

Fifty years later we still find the same little room, now old-fashioned and worn. The clock cannot be heard to-day, for outside the wind is raging, and the blossom tree is beating itself in a frenzied fury against the window pane. The blue curtains hang limp and pale, every vestige of blueness now faded.

A bed is drawn up near the window, so that its occupant, a silver-haired old lady of 64, may gaze at the blossom, which always has a fascination for her. A man about the same age is always reading to her. He ceases at her request, and one catches the words, "David," and "brother," whispered through her parted lips. David has looked after his sister since her tragic fall had destined her to be a cripple for life. Now it seemed his vigil was drawing to a close.

The reading commenced once more. The tree outside seemed to be beating its life out in a wild accompaniment.

Ten minutes slipped by. Then, with a crash, the window burst open, and a shower of blossom swept on to the bed. At the same minute, there was a sickening thud as the tree outside fell shattered to the ground. David leapt to his feet, but the figure on the bed did not stir.

Two lives had gone out together. The blossom tree had claimed its own!

—Claire N. Biggs.

ANALECTA (continued)

EPSTEIN.

While critics, on the whole, shrink in horror from manifestation of Epstein's genius, there are a few whose mild praises can only be insulting, while it is based on the pursuit of what they think is another fashionable "ism," and not on an understanding of his work. Scarcely any have the modesty to stand in front of an example of his art with an open mind, waiting patiently until it can convey its message of itself—a message that probes too far into the deep springs of life to permit any but the most intrepid to receive it.

Let us approach the artist's statuette in red stone, "Cursed be the Day Wherein I was Born." If we have come expecting to see the embodiment of some corporate thing to which our eye is already well accustomed, we shall be rudely shaken when we behold the fiercely spirited thing that is before us.

It is a creation in stone of an image that has sprung directly from the artist's brain—not obviously beautiful, as was the fully-grown Aphrodite that came from the head of Zeus, but equally vital and wonderful. Is it not a paradoxical miracle—the condensation by man of an abstract idea atrophied into Nature's most concrete substance? And there is amazing beauty in its creation if only we dare see it—the frightful beauty of line and intoxicating curve, such as is only seen in Nature's most colossal pictures, while, above all, there is the voice that screams its wild protest from an agonised throat, provoking an echo in the soul of him who beholds.

But apart from Epstein's nine abstract works, we have many examples of portraiture and busts that reveal his ability as an orthodox painter and sculptor, supplemented by his vitality and astounding perception of human character. There is the pleasantly humorous head of the poet, W. H. Davies, and the more sardonic humour portrayed in the bust, "An American Soldier," while feminine models have been dealt with in the equally masterly manner of which Lady Gregory and Mrs. Ambrose McEvoy are indisputable examples.

The much-discussed statue of Christ cannot but enter briefly into this short commentary on the most amazing creative genius of our time. No other man could have justly conceived the soul of Christ as it feels towards this present age—unhappy and tortured now with a sense of the futility of a great sacrifice—followed foolishly by masses, but known to few. Thus Epstein's is a very sad Christ, but not in any way an immoral one.

It is an ancient saying that one gains from a work of art in proportion to what one takes to it, but one may dispense with everything but a simple desire for sincerity when viewing Epstein's

work. While this is not in accordance with the ideas of those who think it is the artist's job to scrape together only what is beautiful in this world, to arrange it in undisturbing composition for their particular off-duty enjoyment, people who, living their lives with half their senses yet unborn, cry shame on the man who can behold stark life unflinchingly, and create a work of art thereby, yet it is the obvious sacred duty of the true artist to kill with the axe this moral cowardice, and retain within our souls the primeval love of direct truth that was ours when we were nearer God. None shows more hopeful indication of this capability than Epstein, whose "Old Testamentarian" influence has been felt by his best critics, such as Van Diereu.

If we could only accept life as it is presented to us, instead of impiously refuting it and smothering its reality with our own stuffy illusions, we would be more fit to receive the works of men of genius and gather untold wealth from them. Then would we accrue to such men as Epstein neither praise nor blame—their part in our social constitution would be as essential as that of fire among the elements of nature.

—Edith Buchanan, Art School.

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MAGIC THINGS.

Life is full of magic things—
A painted sky the sunset brings,
Golden dawn across the hills,
Sparkling dew on daffodils,
Moonlight on a gnarled gum-tree,
Dazzling sun upon the sea.

—N. Elvins, Art School.

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OUR FIRST COUSINS.

The study of the habits and characteristics of the monkey is especially interesting, because of its close affinity with the human race. It is still a matter of dispute among scientists as to whether its apparent intelligence springs from a higher mental capacity than that of most animals, or whether it is a matter of simple imitation, but whatever the cause, there is no doubt that its actions appear particularly human-like to us. Scientific opinion generally favours the idea that there is a close physical connection between the monkey tribes and ourselves, and that it is possible that both are descended from some common ancestor of the remote past. The clearest proof of this kinship is that the blood of man and monkey have practically the same chemical composition.

The monkey tribe is scientifically known as the

ANALECTA (continued)

quadrumana, meaning four-handed, the feet, in the case of the hind legs, having the great toes placed in the same relative position as the thumb occupies in the hand. The hands and feet in such cases are particularly well adapted for grasping and climbing, but do not carry the same advantage for walking that is possessed by the feet of the quadrupeds.

The quadrumana family includes many varieties, conveniently grouped under the divisions apes, baboons, monkeys proper, and lemurs. Of these, the anthropoid apes are the nearest approach to man. Like him, and unlike other monkeys, they have neither cheek pouches for the storage of food, nor tails, and they nearly reach the average human height. They maintain a semi-erect position, supporting themselves by resting the knuckles on the ground, as the arms are longer in comparison with the legs than those of man. These man-like apes show traces of comparatively high mental powers, and, like savages, are imitative; they build platforms cleverly woven by themselves in the trees, and sit or sleep in them in habitual laziness.

There are three main divisions of the anthropoid apes—the gibbon, the orang-utang, while the gorilla and the chimpanzee constitute the third division.

Of these, the gibbon is mentally the most backward, though physically its activity is extraordinary; it flings itself from tree to tree with marvellous agility, and its movements are so quick that it has been known to catch a bird on the wing.

Very human-like in its actions is the orang-utang; its hands have much of the wonderful capabilities of those of man, and, like the chimpanzee, when living in captivity, may be seen, on cold days, wrapping sacks about itself for warmth.

The largest and fiercest of the apes is the gorilla. Its appearance is very human-like, one of its special resemblances to men being its size of heel and breadth of foot, which enable it to walk erect more easily.

In the chimpanzee, the herd instinct is strongly developed; its habit of moving in massed formation enabling the individuals to live in comparative safety. It resembles the orang-utang in its ability to learn tricks in captivity.

Scientific interest in the history of the anthropoid ape and its bearing on man's evolution has been quickened in recent years by discoveries of long buried remains of primitive man, particularly of the skulls, which, because of their bony nature, have been better preserved. Even the cleverest

scientists have not been able to positively decide as to whether some of the oldest of these skulls have been those of men or apes, man's physical and mental development at the time not having advanced very far beyond the point at which he separated from the original stock. In fact, the available information is still too meagre to allow of any definite theories being formed as to the exact degree of kinship between man and ape.

—David M. Eager.

5

TO CONTRIBUTORS.

Dear Colleagues,—

What a pother you put me in on "Reading Day." When I read the items technical, I murmur—I have a habit of talking to myself like all great people—what a pity this is not a technical magazine, instead of a technical school magazine; when I read the art notes, I sigh, and wish I was editing an art paper; then turning to contributions junior, but by no means junior in aspiration, I feel I ought to be filling the pages with junior school interests.. Then I sigh still more; because this editing is like loading a Christmas Tree—there must be something for everybody, and everybody must be satisfied. So I have to decide that it isn't how many pages I can fill for any section, but what will seem best to represent that section.

If I err in your opinion by not including your effort, do not say, "I'll not bother again." Remember the birds in the spring. They are not singing to please *you*. They are giving expression to *themselves*. One essay, rejected or otherwise, will not give you that. Keep on expressing yourself.

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ENTR'ACT—THE MATHEMATICAL TEA PARTY.

After much labour it was concluded that—The integral between the limits 3d and 4d of (pie plus two hot dogs) dt squared—equals, the integral between the same limits of (one feed) dt squared; which finally yields—one full stomach, using the substitution dt squared equals r.i.p.

I should have started off by warning really nice people not to read this, but then perhaps the title would have already done that.

HIKING CLUB.

HIKING, 1931.

Again we stand bidding adieu to another year, and wondering if we have made the very best of our opportunities.

The privileges that we had are a healthy day's exercise, with enjoyable companions, and the friendships so formed are pleasant memories.

The members have participated in six hikes this year, but deviated slightly from the original routes published in the previous issue of the "Open Door."

The first hike was from Evelyn, via the mount, to Croydon.

Will anyone forget that climb up the mount, or the apples gained afterwards as a just reward?

The second hike was from Selby to Clematis. The view obtained from John's Hill is not likely to be forgotten soon, nor the kangaroos in the wild animal sanctuary.

The third hike was taken by the boys only. The route from Boronia lay along the 1 in 20 road to Sassafra, and on to the Gully.

The fourth hike was made by motor van to Officer, where some members developed a liking for heath, and others an affinity for water. The Bunyip Creek Reservoir was duly inspected and recorded by photographs.

The fifth hike was made by motor van to Hurstbridge, then hiking through the pretty Plenty River gorge to South Morang.

The sixth hike was made by motor van to Healesville. With a record number in attendance, the party visited numerous small weirs, and the Maroondah Dam. This hike was most successful in all details, and, after walking 14 miles, proved a fitting end of this year's activities.

This resume would not be complete without a word of appreciation to Miss Watts, Mr. Lewis and Mr. Howells for their unfailing interest in the club, and for accompanying us on our hikes.

Note.—The Annual Social and Dance will be held in the Social Hall, on Saturday, December 12, commencing at 8 p.m. All members and friends invited. For further particulars, see Miss Watts, or members of the Committee.

—L.J.H.

BY THE WAY

O.E.S. NOTES.

Mr. Norman Westmore, who was elected President for 1931-32, was transferred to Yallourn shortly after his election, and forwarded his resignation, which was regretfully accepted. Mr. Max Johnston was elected to fill the vacancy for the remainder of the term.

The mid-week function proved to be the expected success, and those present gave Mr. Colin Scarborough a hearty welcome home. Mr. Scarborough's talk on his experiences abroad was delightfully interesting and excellently received. Unfortunately, many familiar faces were noticeably absent from the past students quarter of the assembly.

Mr. Colin Scarborough signaled his arrival home by making a momentous stride, in his departure from bachelordom, by becoming engaged to Miss Hilda Webster—not unknown at the College. Congratulations, and very best wishes.

Mr. Harry Small recently left Melbourne on a business and pleasure trip to America, and is expected home again early in the New Year.

This issue goes to press on the eve of a smoke night, at which members are asked to express opinions regarding the Gold Standard, a subject of much topical interest. An enjoyable evening is expected.

The arrangements for the O.E.S. Annual Dinner have not been finalised, but members are warned to keep it in mind.

Aitken is still adding lustre to the Engineer's department at Camberwell. These slack times, however, he spends part of his time "inspecting trees." His very words.

Met the genial G. R. Giles, of Vocational Guidance fame, the other day. As cheery as ever. Asked him if he knew of a £1000 a year job with a £100 a year responsibility. He did. But it was well filled. No, I wasn't in the mood for guessing!

5

SWINBURNE OLD GIRLS' ASSOCIATION.

In connection with our Old Girls' Association, we would like to ask any girl who changes her address to communicate with the secretaries, Jessie Anderson, Swinburne Technical College, or Amy Brearly, High Rd., Camberwell, so that the new address may be recorded. Owing to the number of wrong addresses on the book, many letters were returned from the Postal Department unclaimed, when both the Reunion and Dance were being arranged.

BY THE WAY (continued)

The Old Girls' Association held their Annual Reunion on July 9, 1931, in the Social Hall of the College. There was a large attendance of both past and present students. Misses Amy Fryer, Elaine Grindrod and Alma Ewe kindly helped with the entertainment. Mr. Jim Needham, an ex-Engineering student, kindly came and performed some clever and interesting conjuring tricks.

Another most enjoyable evening was spent on Saturday, September 12, when the Annual Dance was held in the Social Hall. The Committee were responsible for the gay decorations and the programme. There was a good attendance of Old Girls and friends.

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ITEMS OF SOCIAL INTEREST.

We wish to announce the marriage of Herberta Kerr, now Mrs. Izod; and Janet Jocelyn, now Mrs. Wallace. We extend hearty wishes for their future happiness.

We congratulate Mrs. L. J. Jorgensen (May Smith) on the birth of a daughter (Rona Elaine).

Miss Chrissie Hubbard has announced her engagement, and we extend all our best wishes to her.

A. J. COOK.
D. E. SMITH.

A romance, which started practically at pram-time, commenced a new chapter, when Yvonne Quittenton married Cecil Waring last April. The ceremony took place at Holy Trinity Church, Kew, at 7 p.m. As the bride was leaving the church, the Girl Guides formed a guard of honour with their Morse code flags. The bride herself is a very popular lieutenant with the Guides.

Apparently Clara, of the A. Gourley family, intends to be one of the good little wives in the good old-fashioned way, for at the moment she is busily learning how to poach eggs and boil puddings, and all the other things that one learns at a cooking class.

Old students of the Girls' Junior School will be interested to hear that Mrs. Roberts (Miss D. Smalley, who was on the staff at the Girls' School), has a small daughter; also Mrs. Middleton (nee Jean Watts, one of the pioneers of the School), whose home is in Adelaide, has a daughter a year old.

The Secretaries wish to thank all the Old Collegians for their donations towards Miss Eyles' present. The following letter was received by

Jessie Anderson, and she thought that the Old Collegians would be interested to hear what Miss Eyles said, so she takes this opportunity of putting it in the Magazine.

2 Orange Grove,
Camberwell.

Dear Jessie,—

What a wonderful surprise you gave me this morning, and how very kind of the old Junior School girls to think of me! Thank you all ever so much for your beautiful gift.

I thought of you all on the evening of your Reunion, and wished that I could be with you. I have made wonderful progress since my operation, and hope by next year to be leading a normal life, so if you will invite me, perhaps I shall be able to see you all at your next Reunion.

I was very interested to hear the names of the new office-bearers. I wish I could thank all the girls personally for the lovely lamp, but, of course, that is not possible. When you are writing "Old Girls' Notes" for the next issue of the "Open Door," would you, please, Jessie, ask them to accept my very sincere thanks, and say how much I appreciated their thoughtfulness, as well as the gift. I would be so glad if you would do this for me. With kind regards from

Yours very sincerely,
(Signed) DOROTHY EYLES.

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OBITUARY.

The Staff and Old Girls of the Junior School extend their deepest sympathy to Thursel Doidge in her recent sad bereavement.

**SPRING IN AUSTRALIA.**

Nowhere in the world does Spring announce itself with such splendour as in Australia. Along every river, up the tributary creeks, on the steep slopes of the gullies, our wattles, fair forest trees, burst into a profusion of golden blossom no other country can rival. They pour upon the cool air their soft fragrance, as sweet as that of eglantine, but far sweeter to the Australian abroad when it floods him with memories of home in the spring-time. The tips of the young gum-tree show ruby red against the sunset gold. The vapour of the aromatic oil of the gum-tree acts as a tonic upon the wanderer. The songsters, too, make them-

GIRLS' JUNIOR SCHOOL (continued)

selves most clearly heard in the musical welcome of the Spring. The peach blossom is showing its tiny bud to the world, while the almond blossom has come and gone. To respond to the call of Spring is to retain one of our most precious capacities for joy.

—S.E., Form B3.

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"OUR SCHOOL DIARY."

During classes our rivals have an uncanny way of producing mysterious scraps of paper from nowhere, resulting in B2 losing their mark towards gaining the coveted shield, which our Principal has had made to encourage competition between the different forms.

Monday evenings are a form of undisguised pleasure for our honorable parents; it is then that their offsprings place before them dishes which are guaranteed to create an appetite for more, if they possess courage enough to attempt to partake of the said edibles.

Second-year students are fully aware that drawn thread work is an effective way of ornamenting garments—that DRAWN thread work looks really delightful on guest towels; and that DR-AW-N thread work is a decoration which can be applied swiftly and simply to night-gowns, etc.; but "Miss Swinburne" is inclined to disagree—sometimes.

Junior girls were given a surprise when they came face to face with a skeleton (in a glass case) when viewing the work of the senior students in the past exhibition, and one child tragically vowed that she would not venture forth if they offered to make her Queen of Sheba, but after that strange incident we thoroughly enjoyed our tour of inspection, and all solemnly agreed that the seniors must be "sports" and we were not being sarcastic.

—Ray Sciree.

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A TOUR THROUGH NEW ZEALAND.

We left Melbourne on a Thursday by the s.s. "Maheno" at 11 o'clock in the morning. We were bound for Invercargill, via The Bluff. On the following Thursday and Friday the weather was dull and the sea rough, but on the Saturday and Sunday the weather fined up beautifully, and everybody voted it was a "real" pleasure trip. On the Saturday we saw a whale spouting not very far away from the ship. Then on the Sunday afternoon about 4 o'clock we saw a part of the South Island of New Zealand. It was just a long line of mountains, capped with snow, looking just like a relief map. At about 7 o'clock the next

morning we got in at The Bluff, which was a pretty sight then. It is a little open bay surrounded by mountains. We could only see the top of the mountains, as the rest was covered with clouds. We went by train to Invercargill. The trains are different from ours; they are more narrow, and the whole of the carriages are open. There are two seats on one side and one on the other, with a gangway between; the backs of the seats swing either way, so that you can face which way you like. Then on the front and back of the carriages are little platforms which join on to other carriages. Invercargill is a sleepy little town, and too cold for me. We left Invercargill by train for Dunedin. Dunedin is very hilly, and you can get some lovely views of the South Island. Then we left by train for Oamaru, Timaru and Christchurch. When we left Dunedin the train ran around the bay, went through some hills and then came out on the ocean. From then on to Christchurch the train winds around, with the ocean on the right and plains bordered by mountains on the left. Sometimes a hill would jut out, and we would go underneath it in a tunnel, and sometimes we would go over dried-up river beds only about a foot deep, covered with round, shiny pebbles, with perhaps a trickle of water in the centre of the bed. Christchurch is flat, with the river Avon running through the city. All along the banks of the river are gardens. The river is only about two feet deep and narrow, but beautifully clear. On holidays the river is crowded with little canoes, and in the night people crowd to the banks and listen to the band, while others paddle up and down in the canoes. A couple of days before we got there a new fountain had been finished being built. This fountain changed spray and different colours in the night automatically. We met the man who designed it, and he told us that they had had the main spray in the middle up to a height of forty feet, only that when the wind blew it blew the water over the shops, so that they had to lower it. From Christchurch we went to Lyttelton by electric train—the only one we saw in New Zealand; they are built the same as the steam. From Lyttelton we went by boat to Wellington. We went on board at 8 o'clock in the night, and got to Wellington at 7 o'clock the next morning. Wellington is sometimes called "Windy Wellington." The city occupies the plain skirting the shore, while close behind rises a range of hills whose lower slopes are all built on. Some of the houses built on the hills have rickety wooden steps leading to them, which looked as if they'd blow away. On a clear day, looking over Cook Strait, the mountains in the South Island are visible. Then we left Wellington by train for Masterston, Palmerston North, Wanganui, Hawera and New Plymouth. After we left Palmerston for Wanganui the train ran along the banks of the Wanganui river, which is noted for its beauty. In many parts of its course high cliffs rise on either side, which are covered with dense vegeta-

GIRLS' JUNIOR SCHOOL (*continued*)

tion. Sometimes a hill would jut down to the river and the train would go under the hill in a tunnel and come out the other side still on the river bank. We didn't see any Maoris in the South Island, but we saw a lot in the North, and nearly all of them seemed to be in Hawera and New Plymouth. In Hawera there was a Maori market, and there was a dreadful row coming from it; they all seemed to be talking together like a lot of Chinese. We were over there at the time of the earthquakes, and we felt two shocks in Hawera. From Hawera to New Plymouth we travelled around the foot of Mt. Egmont. At first all we could see was a lot of snow perched up in the sky, and then as the clouds cleared away we saw the whole of it. Then we left New Plymouth for Hamilton in the North. We left at 7 o'clock in the morning and got to Hamilton at 9 o'clock in the night. That day we travelled over nearly the whole of the North Island, and we saw some beautiful scenery. One time we would be in the mountains, then we would be in a tunnel, and then in a valley, and then on a plain. From Hamilton we went to Auckland. In the middle of the harbour at Auckland is a volcano, and, as some people say, it's the best place for it. Auckland is hilly, too, and at one part there are beautiful gardens built on a hill with ramps leading to the city. Auckland is the best of the towns as far as the shops are concerned. There is a beautiful museum that has not been built long, and it is built on a hill overlooking the harbour, and it is surrounded by hot houses and rockeries. It is only closed two days in the year, and the only day we could go to see it, it was closed, so we had to satisfy ourselves with the outside of it, the rockeries and the view. Then we left Auckland by the "Manganui" on a Friday, and got to Sydney on the Tuesday. We had a rough trip coming back, and nearly everybody was glad to get off. I would sooner live in New Zealand than here. Some people say that it will disappear altogether with the earthquakes, but I hope that doesn't happen, as I am looking forward to some more tours.

—E. Smith.

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C1 FORM NOTES.

We are still here enjoying the privileges which our education offers us. Our form has become quite famous now, having won the shield for tidiness and general good conduct, and we intend to keep it.

Another great deed of ours was the acting of "As You Like It." But the second term has had its drawbacks, for we have won no basketball or tennis matches. Perhaps we are too fond of study (?).

—T. Nicholls.

C2 FORM NOTES.

We girls of Form C2 are brought once again to meet the readers of our Magazine. Many eventful things have happened since we last had our say. One of these was when our form had to act the play, "As You Like It," in front of the rest of the Girls' Junior School.

[Query, Ed. O.D., who did act it?]

We are very keen—like the rest of the forms—to win the shield which is given monthly to the form which obtains the highest number of marks for different duties.

We were sorry at the end of the term to hear that our Form Mistress, Miss Moreton, was leaving us for a time. We are looking forward to having her with us again in the not very distant future.

—B. Lawrence.

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B1 FORM NOTES.

B1 has been a very happy form this year. We have all tried to make our form room—Room 2—look particularly attractive. We are very anxious to win the shield which has been the objective of each form. Most of us found the exams. very hard this term. The standard of work was not up to the mark, but we will improve.

The exams. are over, and we are preparing to hurry home to try our hand at cooking for the family. Can you imagine the family coming home to a half-made tea and to a funnily made bed without complaining? I can't.

—Amy McAllan.

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B2 FORM NOTES.

B2 are the proud possessors of the Form Room Shield for August.

We are all pleased to see that our rival form, B1, won the championship in basketball.

On Thursday afternoons we are being sustained with "Old Black Joe" and "Cockles and Mussels" till we all know them. We are speculating as to the next item from the boys' repertoire.

—Beatrice O'Neill.

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B3 FORM NOTES.

This term started off very well, and with few exceptions we found school very agreeable. Our visit to the Gas Works was a great success, but, needless to say, we all took scented cards. Our run for the train on the return was a scene worth

GIRLS' JUNIOR SCHOOL (continued)

witnessing, and three girls reached the station just as the train went out. Another item of interest. Miss Gilpin has had a shield made to be given to the form with the highest number of marks at the end of each month. Marks are deducted for untidy rooms, the number of girls from the form in detention after school, etc. Marks are added for having a good supply of flowers in the room, and having the best results in sport. B3 came a close second last month, and we have tried to come first this month.

—Hilda Purnell.

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FORM NOTES—A SECTION.

We hope to have freedom from the noises of the motor school this term. Last term, we were nearly all nervous wrecks by the end of the term. Peace and quiet would be reigning over the class in Room 1, when, all of a sudden, "bang" goes one of the cars in the motor school. We sometimes hear several stifled squeals from startled girls, and there are groans as someone sticks a needle in her finger, or puts a blob of paint where it is not wanted. This is very distracting, and we find it hard to concentrate on our lessons, although we try (?). However, this term we are hoping for peace and quietness.

—Inez Shaw.

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THE LYRE BIRD.

Up in the Dandenongs and the surrounding ranges lives the lyre bird. Among the tree ferns the hen builds her nest. Sometimes she chooses a site for her nest in the trunk of a tree, safe from prowling foxes. Sometimes, unfortunately, the nest is found on the bank of a creek, within reach of the fox, who likes eggs and chicks very much.

The hen only lays one egg at a time. The chick is taken care of by its mother for many weeks, until it can get its own food. It is fed on worms, grubs, white ants, spiders, beetles, yabbies, crickets, grasshoppers, centipedes and scorpions. The hen stores the food in a little bag under her bill, where the throat meets it. Part of the chick's lessons consists in learning how to ascend the trees to get out of the way of the bird's only enemy, the fox. The lyre bird flies badly, but jumps splendidly, however, and the progress upward is helped by flaps and jumps from limb to limb of the tree. The chick has very large feet, so that he can scratch for his food in the hard ground.

The lyre bird has over forty calls of mimicry. A few of them are the grey thrush, butcher bird, pilot bird, coachwhip bird, rosella, magpie and kookaburra. He will repeat the calls in exactly

the same order as before. He also imitates the sawing of wood, the blows of an axe, the clinking of wedges, and many other sounds..

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THE DESERTED HOUSE.

The light came in at the window,
And lit up the old bare walls,
While over the lonely hearthstone
A flood of sunlight falls.

I see in a spell of dreaming,
Where the fire on the hearthstone glows
While dear little children crowd round it
Warming cold, pink little toes.

The cobwebs hang from the ceiling,
Where once no cobwebs clung,
And from nails now worn and rusted
Gay pictures one time hung.

The mice run over the floor,
With never a foe to fear,
And the old walls echo no laughter,
As they did in a long dead year.

The old walls echo no laughter,
The floors are rotting away,
Blind windows stare out into soace,
And fade with the dying day.

—Jessie Paterson, Form A.

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GIRLS' SPORTS.

This term has been a very exciting and enjoyable one from the sporting point of view. It was decided that intersectional basketball matches be arranged, and each form captain was to choose a team from her own form. This led to intense excitement and created great interest. Miss Gilpin had kindly offered a shield for the winning team. In the heats, C1 v. B2 ended in a win for B2; A v. C2 ended in a win for A; B1 v. B3 ended in a win for B1; B1 v. B2 ended in a win for B1; B1 v. A ended in a win for B1. The victors in basketball were the girls of B1 team.

This section was not so fortunate at tennis. Here, after a great struggle, C2 managed to vanquish all their opponents, and it is with pleasure we heartily congratulate them on winning the tournament.

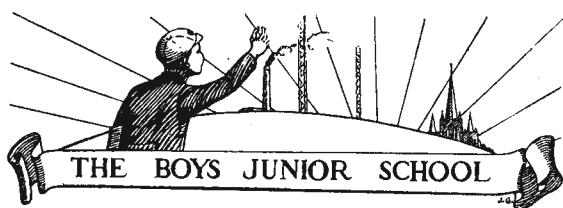
Mistress: "Why do you slam all the doors like that?"

Mary: "It's hereditary, ma'am. My father is a railway porter."

Stephen: "Mummie, why are you so pretty?"

Mother: "Because when I was a little girl I was good."

Stephen: "What a naughty boy Daddy must have been."



A VISIT TO THE ROYAL MINT.

It was with great surprise that we heard that we were going to the Royal Mint with Mr. Gray. We left Glenferrie at 1.15 p.m., arriving at the Mint at 2 o'clock, where, after 20 minutes' inspection, we obtained the following knowledge.

In the entrance hall, there were four cubes, the smallest measuring about a foot, and the largest about a yard. The small cube represented the bulk of silver that is found in £1,000,000 of average Victorian gold. The second cube represented the amount of copper in £1,000,000 of standard gold, and the third represented the amount of fine gold in £1,000,000 of standard gold. These two bulks are melted together to form £1,000,000 of standard or 22 carat gold (22 parts gold, and 2 parts copper), which was represented in bulk by the largest cube. Standard gold is used for making sovereigns.

Gold, as it is found, has to be purified. This is done by passing chlorine gas through the molten gold; the pure gold sinks to the bottom of the cauldron, leaving silver chloride and other impurities on the top. This pure gold is mixed with copper (as explained above), and moulded into ingots about ten inches long. Each ingot weighs 400 ounces troy, and is worth £1500.

In the melting department a large clay cauldron, containing boiling silver, was lifted out of a furnace by a system of pulleys and carried by rollers on an overhead girder to the moulds, into which the boiling silver was poured. Pieces of charcoal were put on top of the silver to prevent oxidation when the silver was heated, and a small bar of silver was put across the mouth of the cauldron, so that the charcoal would not fall into the moulds with the boiling silver. The moulds formed bars of silver, about two feet long and half an inch thick, which will make about 400 florins.

These silver bars were then taken to the coining department, where they were rolled out in heavy machines to the thickness of a florin. This process takes about an hour, because if they are rolled out too quickly the silver will crack and

have to be remelted. The silver strips, now about six feet long, were then punched into blanks for florins at the rate of about 200 per minute. All the scraps and broken blanks are remelted. The edges of the coins were then raised so that the faces would not be damaged. A man rang the blanks on to a metal plate to see if they were all good. These are then automatically weighed, where the light and heavy blanks were remelted, and the medium weight ones were kept. From the automatic scales the blanks were taken to the stamping machine, where the head, the tail and the milling on the edges were stamped simultaneously. These coins were then placed on an examining table, where they travelled along a belt, and returned upside down, so that both sides could be examined, after which they are placed in canvas bags, with £200 in each bag.

These bags of florins are placed in the strong-room, which has two doors. The outer door has a meter on it, which shows how much current is running through the wires around the door. If these wires are cut, the meter immediately rings up the police. The inner door, which is about six inches thick, has a handle which closes all the bolts inside, but does not open them; they have to be opened by three different keys, each of which are held by different men. This money is given to the Commonwealth Treasury, from where it is distributed to the banks as it is needed.

We thus had a very interesting trip, and returned with the knowledge of the making of money.

—Harold E. R. Steele, A1.

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HOW DOES A SEWING MACHINE MAKE A STITCH?

There are, of course, various forms of stitches made by sewing machines, but they are all made on the same principle, and the description here given of how a common chain stitch is made will afford a very good idea of the principle.

The stitch is effected by the double work of the threaded needle and the bobbin, or spool, whose position is just below that part of the table of the machine through which the needle moves up and down.

As the needle goes down with its loop of cotton, the bobbin moves round or forward and catches the needle's loop, which is held and tightened as the needle goes up again; and thus the stitch is

BOYS' JUNIOR SCHOOL (*continued*)

formed. Again the needle comes down, and the same process is repeated, and so a row of stitches is made with very great rapidity, neatness and security.

—By C. Browne, B3.

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WHY STUDY?

The more we study,
The more we learn;
The more we learn,
The more we know;
The more we know,
The more we forget—
So why study?

The less we study,
The less we learn;
The less we learn,
The less we know;
The less we know,
The less we forget;
So why study?

—T. J. Connor, A2.

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A POET HITS BACK WITHOUT MERCY.

In the time of Charles II. it was the custom, when a gentleman drank a lady's health as a toast, in order to do her honour, to throw some part of his dress or something he had on him into the fire, an example which all his companions were in honour bound to follow.

One day, when Sir Charles Sedley, the famous poet, was sitting with a number of friends at a banquet, one of them noticed that he had a very rich lace cravat on. Sedley's friend, who considered himself a wag, proposed a toast to a lady, and after it was drunk committed his own cravat to the flames. All the others had to do the same, but it was with a wry face that the poet threw his rich article into the fire.

However, he took it in good part, and vowed to get his own back.

He therefore watched his opportunity, and when the same party was assembled on a similar occasion and was drinking a toast to Nell Gwynne, he called a waiter and told him to show a tooth-

drawer, as the dentists were then called, whom he had brought for the occasion.

"Now," said he, "draw this decayed tooth, which has long been paining me," and he pointed to a worthless tooth in his mouth.

The tooth was duly drawn, and the poet threw it into the fire, and would not listen to their pleas for mercy, but watched the guests one after another place themselves in the hands of the operator, and writhe with pain while the tooth was drawn.

"Patience, gentlemen, patience," he said. "You know you promised me my frolic, and now I have had it."

—A.R., B7.

**ATHLETICS.**

On 16th October, the combined athletic meeting will be held at Castlemaine. Representatives from all the technical schools of Victoria will compete, and Swinburne will attempt to retain the "Winner"—"Sporting Globe" Cup, the trophy for the A Grade. In addition, a grand aggregate Cup, presented by the Chief Inspector of Technical Schools, will be presented to the school gaining the highest aggregate in both Senior and Junior School events.

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COLLEGE SPORTS MEETING.

2nd October, 1931.

The annual sports meeting of the College was held at Glenferrie on October 2. The names of the successful competitors are as follow:—

Senior School Championship—aggregate of all championship events.—1, Rolland, 18½ points; 2, Spears, 11 points; 3, Pitts, 9½ points.

Handicaps.—100 yds., Mansell; 220 yds., McCracken; 440 yds., S. Lewis; 1 mile, Clarke; High Jump, Pitts and Barrett; Hop, Step and Jump, Ledgerd; Weight Putt, Wishart; Novelty Event, Andell.

SPORTING (continued)**BOYS' J.T.S.**

65 yds., Under 13—Monk 1, Farmer 2, Denny 3, 65 yds., Under 14—Plunkett 1, Trinnick 2, Merri-
man 3; 65 yds., Under 15—Pearson 1, Ross 2,
Marven 3; 65 yds., Over 15—Ryan 1, Bradley 2,
Wilson 3; 100 yds., Under 13—Monk 1, Farmer 2,
Reinhardt 3; 100 yds., Under 14—Bishop 1, Kinder
2, Robbins 3; 100 yds., Under 15—Cadman 1,
Binedell 2, Stocks 3; 100 yds., Over 15—Packe 1,
Wyatt 2, Harris 3; 220 yds., Under 14—Bishop 1,
King 2, Robbins 3; 220 yds., Under 15—Cadman 1,
Donaldson 2, Binedell 3; 220 yds., Over 15—
Packe 1, Wyatt 2, Mitchell 3; 440 yds., Under 14
—Bishop 1, Faller 2, Robbins 3; 440 yds., Under
15—Donaldson 1, Cadman 2, Binedell 3; 440 yds.,

Champions.—Under 13, Monk; Under 14, Bishop;
Under 15, Cadman; Under 16, Harris.

Open Champion—Packe.

GIRLS.

65 yds., Under 13—T. Mason 1, M. Bartlett 2,
N. Read 3; 65 yds., Under 14—F. Wilcock 1,
M. Harris 2, L. Spelling 3; 65 yds., Under 15—
T. Sole 1, V. Enright 2, E. Gasson 3.

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BOYS' J.T.S.**INTER-HOUSE CONTESTS.**

Aggregate totals for the Boanas Cup are as fol-
lows:—Flinders 332, Latrobe 309, Henty 303,
Collins 299, Batman 286, Hume 261.



JUNIOR SCHOOL FOOTBALL TEAM

Over 15—Packe 1, Harris 2, Wilson 3; High
Jump, Under 13—Monk 1, Garraway 2, Farmer 3;
High Jump, Under 14—Plunkett 1, Marcroft 2,
Bishop 3; High Jump, Under 15—Elder and Halli-
fax equal 1, Stocks 3; High Jump, Over 15—
Wilson 1, Harris 2, Ryan 3; Long Jump, Under 13
—Kitchen 1, Garraway 2, Monk 3; Long Jump,
Under 14—Bishop 1, Kinder and King equal 2;
Long Jump, Under 15—Cadman 1, Bonnice 2,
Stocks 3; Long Jump, Over 15—Buchanan 1,
Wyatt 2, Harris 3; 880 yds., Open—Packe 1,
Harris 2, Wilson 3.

Points for the Athletic Pennant.—Henty, 99;
Flinders, 71 5-6; Hume, 62 5-6; Collins, 41 5-6;
Batman, 36 1-3; Latrobe, 33.

Pennants are held by the following Houses:—
Football, Flinders House; Progress (scholarship),
Flinders House; Cricket, Latrobe; Assembly,
Latrobe; Discipline, Flinders.

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FOOTBALL.

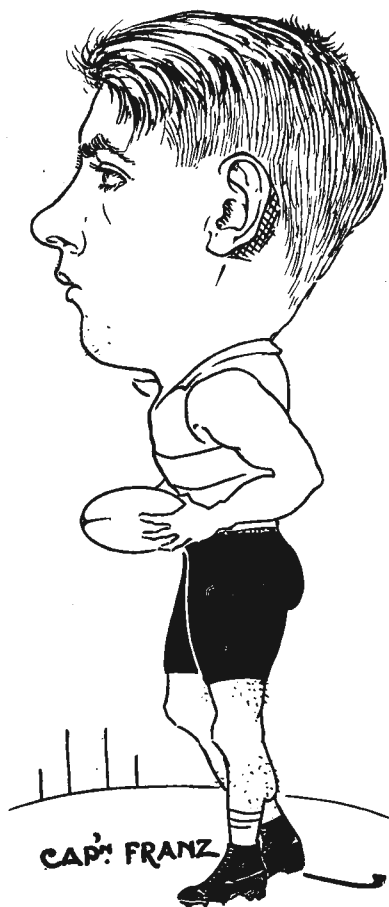
For the first time, our J.T.S. football team was
placed in the lower section of the Inter-School
football competition. We are pleased to state
that through the success of the team this year, we
won the premiership of this section, and conse-
quently regained our position in the senior section.

Results:—Swinburne (15 goals 15 behinds,) de-

SPORTING (continued)

feated Brighton (7-2); Swinburne (12-10) d. West Melbourne (6-8); Richmond (8-5) d. Swinburne (6-6); Swinburne (15-18) d. Brunswick (4-10); Swinburne (11-11) d. Brighton (8-5); West Melbourne (11-8) d. Swinburne (6-4); Swinburne (19-12) d. Richmond (8-15); Swinburne (16-18) d. Brunswick (6-10).

In the final match, Swinburne (7-12) d. West Melbourne (5-5).



In the challenge match between A and B sections, South Melbourne (12-22) defeated Swinburne (7-5).

Chief goal-kickers for season:—Hodgson 31, Garrick 29, Wilson 19, Woodley 11.

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CRICKET.

Fixtures for the current round are:—

September 16-23—Swinburne v. W.M.C., at Auburn; September 30-Oct. 7—Swinburne v.

Footscray, at Auburn; October 14-21—Caulfield v. Swinburne, at Caulfield; October 28-November 4—Swinburne v. South Melbourne, at Auburn; November 11-18—Brighton v. Swinburne, at Brighton.

At the end of the first round, played during the first term, the points scored in the competition were:—South Melbourne, 10 points; Brighton, Footscray, 9; Swinburne, 8; W.M.C., 4; Caulfield, 3.

Our representatives will be picked from the following:—Woodley (captain), Jenkins, Hodgkins, Clarke, Buchanan, Anscombe, Laing, Hodgson, Daly, Vicars, Mounter, Ellingham, Herbert.

**Dried Apricot Jam.**

One lb. dried apricots, 4 pints water, 3 to 4 lb. sugar, juice of 2 lemons.

Wash the apricots and soak 48 hours. Put into a preserving pan with the water and cook gently until quite tender, about 1 to 1½ hours. Add the sugar, dissolve carefully, bring to boil, and boil rapidly from ½ to 1 hour until the jam will set in a saucer.

Shortbread Biscuits.

Four ozs. butter, 6 ozs. flour, 1 oz. rice flour, 2 ozs. castor sugar, salt, essence of vanilla, 1 yolk of egg.

Icing.—¼ lb. icing sugar, 1 white of egg, 2 to 4 ozs. almond meal.

Method.—Beat the butter and sugar to a cream, add the yolk of egg and beat well, add flour, roll out and cut into rounds. Mix the almond meal and sifted icing sugar together, add sufficient white of egg to make a soft paste. Put in rough lumps on the top of the biscuits. Decorate with a small piece of crystallised cherry. Bake slowly for about 10 to 15 minutes.

Fish Pie.

One lb. cooked fish, ¾ oz. butter, 2 hard boiled eggs, 2 onions, 1 oz. flour, ½ pint milk or fish stock, 6 peppercorns, ½ oz. lean bacon, washed potatoes, salt, yolk of egg.

MECRAFT (continued)

Flake the fish in nice pieces, put the bones of the fish with sufficient water to cover in a stewpan, add to it 1 onion, peppercorns and a sprig of of parsley and thyme. Simmer for 20 minutes, then strain. Fry the remaining onion (chopped) and the bacon cut up small in the butter. Stir in the flour, add the fish stock, bring to the boil, stirring all the time. Let it simmer for 10 minutes. Put a layer of the fish in a pie-dish, cover with sauce, season with salt, pepper and chopped parsley and a few chopped capers. Cover the fish with slices of hard boiled egg and repeat the layers of fish, egg and seasoning until the dish is filled, fish being the last layer. Cover with crust of mashed potatoes, brush over with beaten egg and bake in a moderate oven for half an hour. Sufficient for six persons.

N.B.—Schnapper, salmon, mullet or flathead could be used in this recipe.

TO CONTRIBUTORS.

F.H.—Too uneven this time. C.R.T.—Not quite good enough. F.W.—Requires polish. L.B.—Subject not possible. J.R.—Originality preferred. J.B.R.—You don't use your talent here. Daisy is too tame. B.Im.—Try again. G.M.—

Boys never smoke. T.J.—Rather old now. Own-back.—Appreciated, but not subtle enough.

Ode to Staff.—Other Man.—Fair, but not bright.

How to make Miniature Theatre.—Very sorry to cut, but others better, and of more general interest.

ANSWERS TO ANAGRAMS IN ART SECTION.

1. Intermission.
2. Performance.
3. Masticate.
4. Antipodes.
5. Contribution.
6. Storehouse.

POSTER COMPETITION.

The Exhibition of Posters by Art Students for the Lord Mayor's Appeal was held at Anzac House, and was judged by public vote. The Lord Mayor paid tribute to the excellence of the work. The exhibition was well attended by the public, and it is hoped by the students that the appeal will benefit as a result of their efforts.

