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# The SEDDONIAN

The Journal of the  
Seddon Memorial Technical  
College.

Auckland, New Zealand  
December, 1931

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*Vitae Non*

*Scholae Discimus*

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THE JOURNAL OF THE  
SEDDON MEMORIAL TECHNICAL  
COLLEGE

AUCKLAND, NEW ZEALAND, 1931

## Seddon Memorial Technical College

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**BOARD OF MANAGERS.**—The annual elections for the Board of Managers took place during the month of September, with the result that the Board now comprises the following:—

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|---|---|
| Representing Education Board . . . . .    | Mr. H. S. W. King.<br>Mr. R. Hoe.                           |
| Representing Local Bodies . . . . .       | Mr. W. N. McIntosh.<br>Mr. J. B. Paterson.                  |
| Representing Association of Employers . . | Mr. J. A. C. Allum.<br>Mr. S. E. Wright.                    |
| Representing Association of Employees .   | Mr. J. W. Mitchell.<br>Mr. C. A. Watts.                     |
| Representing School Committees . . . . .  | Mr. G. Brownlee.  |
| Representing Parents of Pupils . . . . .  | Miss B. Carnachan.<br>Mr. K. W. Aimer.<br>Mr. T. G. Julian. |

Due to the retirement of Mr. J. P. McPhail from the Auckland Education Board, he has also withdrawn from our Board of Managers, and has been replaced by Mr. R. Hoe. Mr. Hoe has been for many years, interested in the work of Technical Schools, but on account of his home being in the country, he was unable to take part in the work of administering to a Technical School.

Mr. C. H. Furness who was a representative of the Local Bodies, resigned his seat after seven years of service, and has been replaced by Mr. J. B. Paterson, a member of the Auckland City Council. Mr. Paterson has had a long experience of School-Committee work and a deep interest in education.



COLLEGE STAFF, 1931

*Vitae Non Scholae Discimus*

# THE SEDDONIAN

1931

SEDDON MEMORIAL TECHNICAL COLLEGE  
AUCKLAND, NEW ZEALAND

## Current Topics

**ASSEMBLY HALL.**—It may interest students of the College and parents to know just how the Government has treated the Board of Managers in connection with the erection of our Assembly Hall. A very considerable portion of the funds required for the erection of the Assembly Hall was derived from bequests made by two carpenters—Messrs. J. W. Binns and R. Hindley. The money from the estates began to come in about 1922, and as it was not expended until 1928, a considerable sum in interest was added.

When the building was proposed, the Board of Managers could obtain no assistance whatever from the Government. At or about the same time the Mount Albert Grammar School obtained a Hall at a cost of £7,000 to £8,000 (all paid for, we understand, by the Government). The Board in 1920 had about £8,000 available; and in view of the fact that the Mount Albert Grammar School hall had been built for that sum, it was felt that we could build a hall without Government assistance. Additional classroom accommodation was required, and after considerable trouble the Hon. R. A. Wright agreed to recommend Cabinet to find the sum of £2,750—which he said was the value placed upon the classroom section by the Public Works Department.

In the settling-up process, the Education Department has refused to pay more than £2,734, leaving the remainder to the Board. The contract was carried out by the Public Works Department, and during the course of the contract, extras totalling £707 were also incurred. These extras the Education Department has required the Board of Managers to pay. The Board of Managers refused to pay, and the Education Department deducted the amounts in dispute from other payments due to the Board. The Board has appealed to the Minister, and has sought the help of the Hon. J. B. Donald—Member for the district, in making representations to the Government about the extremely unfair position that has been taken up.

## Girls' Sports Section

### BASKET BALL NOTES

(Games played under the auspices of the Auckland Basketball Association.)

#### SECOND GRADE.

This season has been a fairly successful one for the second grade team. The frequent changing in the personnel of the team hampered us greatly in the first round, but at the end of the second we had attained fourth place in the championship matches. We are proud of the fact that three of our girls—B. Howard, G. Wakefield and L. Craig—were chosen for the second grade reps., and will represent Auckland against Thames.

The play and combination of the team during the knock-out tournament at the end of the season was well above our usual standard. From the beginning our determination to win was shown by our keen but steady play. Our first game was with Training College A. whom we defeated. We then won from Waratah by default. Our next opponents were Rovers whom we defeated after a hard game. Thus in the final round we met John Court Ltd. We gained a well-earned victory and were joyously proclaimed victors of the tournament.

Thus we ended the season in high spirits but with a black suspicion in our minds. Might we not also have won the championship for the season's play if we had treated the matter more seriously?

—Lucy Craig, Captain.

#### THIRD A. GRADE.

During the past season the Third A. Grade team has been rather unfortunate, especially as regards the goals, for two have been incapacitated through illness, and the third has frequently been needed for the Second Grade Team. We have played many good teams, and if we have not won we have lost by only a few goals. We played Ashley's, the team which won the championship of our grade, and to our joy and surprise were beaten by only one goal. Our team has not played consistently, which is to be regretted, as on our "good" days we have shown ourselves practically equal to the best. However, we have no cause to be ashamed of our results, for of eighteen matches played we lost nine, drew two, and won seven. In the knock-out handicap tournament at the end of the season we defeated Training College by default and then had to meet Edendale in the semi-finals. When the bell rang for time, scores were equal but in the extended time—three minutes—Edendale secured one goal, the final result being 7—6.

—Ailsa Fish, Captain.

#### THIRD B. GRADE.

This team has not had a very successful season as far as victories go, although some very exciting games have been played. Of the seventeen games played we succeeded in winning only one and drawing two, but we are by no means ashamed of the scores in the games we lost.

In the tournament held at the new courts in Windmill Road on September 19th to conclude the season, the result of the game was a draw, and we accordingly had to play on for a further three minutes. During the last half minute our opponents, Milne and Choyce, were successful in securing the winning goal, the score being 6—5.

#### FOURTH GRADE A.

At the commencement of the season this team went on to the field with the determination to win the championship, and hopes were raised when the first match resulted in a victory. But we soon found we were mistaken, because as the season advanced, the majority of the games resulted in defeats. It is thought that if the same team had kept together throughout the season, instead of its having to be changed frequently, we would have achieved better results. At the end of the first, and only, round, we had won three games and drawn one, the last being the best game played and the most exciting, with the score 2 all.

In the knock-out tournament we had a bye the first round and then we had to play the winners of this round. The first match resulted in a win, but in the second we were handicapped and were unable to score sufficient goals to be victorious.

Although our achievements were not great we all thoroughly enjoyed "playing the game" and that, after all, is what really matters.

—Pat Gallagher, Captain.

#### HOUSE MATCHES

The Tuesday afternoon competitions have proved more exciting than ever this year, due probably to the fact that more girls have taken part owing to the suspension of hobby classes and other activities. The standard of play, especially in the first House teams, has been high; while those girls who have been grouped together as the "overs" from the Houses have, as a result of special coaching in the drill Hall, shown considerable improvement.

In allotting points, the first eight teams only in each House have been considered. The honour of gaining first place goes to Binns House with 54½ points, those gained by others being, Wellesley 42½, Seddon 29½, Hindley 17½.

#### FORM MATCHES

The great rivalry between the forms was very audibly expressed when the form matches were commenced in the Drill Hall one wet Tuesday afternoon. The excitement was so great that at times it was impossible to hear the referee's whistle. The play was fast and furious, and it was almost as interesting to watch as to play. The games were not finished on the Tuesday and so were continued on the Wednesday with unabated ardour. The final between Com. 3 and Com 2 A., was played off on the next Friday morning, the last of the term. The interest was intense and the barrackers shouted their loudest in opposition to one another. After a very closely-contested game, Com 3 won for the second year in succession.

—N. Waters.

#### INTER-SCHOOL MATCHES V. AUCKLAND GIRLS' GRAMMAR SCHOOL.

A very enjoyable afternoon was spent on Thursday, August 20th, when three teams from Auckland Girls' Grammar School visited us.

The junior team was the first to play, and one team consisted of: Goals, K. Weston, L. Speed, M. Macmillan; Centres, J. Armour, J. Speight, J. MacMahon (captain); Defence, L. Ruddling, G. Piper, B. Campbell.

The first goal was secured by the Grammar team, but quick passing on the part of our girls resulted in a goal. After another goal had been scored by each team, Grammar's fine passing resulted in their scoring frequently until half-time, when the score was 9—2. During the second half the first goal was shot by S.M.T.C. and was followed by two for Grammar. The final goal was for our team, and a good game resulted in a win for Grammar, the score being 13—7.

Our next team to play, the A. Team, consisted of: Goals, G. Gosling, A. Sparkes, P. Shilling; Centres, L. Craig, B. Howard, M. Waters (captain); Defence, G. Wakefield, T. Tippet, J. Cockrane.

Grammar's excellent passing throughout this game was the most notable feature, and resulted in the score at half-time being 10-0. In the second half, however, our girls showed a remarkable improvement, with the result that both sides scored evenly—two goals. The final score was 12-2 in Grammar's favour.

The B. team consisted of: Goals, E. Allen, O. Dore, L. Wardell; Centres, D. Carter, J. Cullen, B. Scouller (captain); Defence, D. Ellis, J. Nicholls, A. Fish.

This game was perhaps the most evenly contested of the three, the goals being scored almost alternately. However, as in the other games, the Grammar's excellent passing stood them in good stead, and at half-time the score was 9-7 in Grammar favour. In the first part of the second half, the game was fairly even, but towards the end, Grammar scored four successive goals which made the final score 16-9.

Afternoon tea in the Cookery Room concluded a very pleasant day. Although all our teams lost, we regard the games as the best we have yet played against another school, for they have taught us the value of, and the way to obtain, quick passing.

#### V. OTAHUHU JUNIOR HIGH SCHOOL.

On Tuesday, 18th August, the Otahuhu Junior High School visited us to play our junior team. Our team consisted of: Goals, A. Sparkes, L. Speed, K. Weston; Centres, J. Speight, J. Armour, J. MacMahon (captain); Defence, L. Ruddling, B. Campbell, G. Piper.

Considering that the girls were first years, the game was a good one, and the players showed much promise. During the first half, the game was very evenly contested and excitement ran high among the spectators. Otahuhu seemed to have the advantage for the first part of the second half, but the enthusiasm shown by our supporters spurred our team to a further effort and, although Otahuhu were winning by two goals, our girls, within a few minutes, secured three goals which meant victory for us.

Afternoon tea, which was later served to all the players in the Kitchen, ended a very pleasant day for the junior team.

#### STAFF v COUNCIL BASKETBALL MATCH

Only a participant in the Staff v. Council basketball match can fully realise the mixed feelings of joy and privilege with which the girls trooped on to the ground. Everyone—scholars, councillors and a few of the more interested members of the men's staff, and perhaps the mistresses themselves—thought how brave and unsophisticated they were to leave their usual apparel in the solitude of their habitat, and rush (?) into the playground in borrowed plumes—abbreviated gym dresses, grubby pinch-my-toes sandshoes, crumpled blouses and other garments, punishable if indulged in by students. Of course the cheers which greeted their arrival survived until they vanished upstairs again. But for all the cheers and jeers, the girls know how chivalrous they were and appreciated the treat afforded them.

The match could scarcely be called a game; it was a matter of hilarity from beginning to end. A certain goaler wanted to know which lines one could run over without being penalised, and considered it easier to send the ball spinning outside than to pop it in the goal. Others ran about clinging tenaciously to the ball until their opponents tired of chasing them. The referee was not above giving a free kick herself, but this fact was almost overlooked because a referee's job is not all "honey."

The first goal was scored for the teachers by Miss Stevens, amid great applause. It was the result of an innocent infringement of the rule which forbids one running with the ball.

Miss Seay delighted everyone. And after all if the ball is just over the line and centres nowhere near, it would be a pity to leave it there for the sake of a white-washed line! All the centres had hard work, the ball doing a good deal of rolling with the six players jostling behind.

The Council secured the next two goals in succession, and then Miss Adams (whom the school team would be proud to reckon as a member) scored a really beautiful shot. Miss Seay was also a goaler, and after securing the ball and running to a better point of vantage, fired at the goal but was unlucky and missed, the ball almost clearing the fence. The Council scored the next goal and Miss M. G. Anderson, scorer, was heard to remark to the referee:

"We want only another goal for a draw. Do see that we get it!"

Miss Lee, however, was unable to oblige but it was observed at one time, that she managed by her clever foot-work to keep the ball near Miss Cambridge. Miss E. Wright soon made the odds even, however, by pitching the ball at a member of the Council (though it is not known whether she knew the identity of the recipient). Miss Seay also gave a demonstration of the "long-distance wave," but, unfortunately, when the ball reached the other side of the court, no one was near to receive it.

The game ended in favour of the Council, 3-2, but it is believed that as Miss Adams held up the ball to "shoot" a Council member relieved her of it.

At the close of the contest both players and spectators were reduced to tears—of laughter. It was the best ending possible to a good season's sport—and the term.

—Edna Perrin and Norah Slaney.

#### GIRLS' TENNIS NOTES

It is with keen enthusiasm and growing confidence that the tennis girls look forward to the coming season, for we have seen at last players from other schools, both in the inter-school matches and the season's play that we are acquitting ourselves quite favourably with Auckland Secondary Schools' Championships.

In last year's Secondary Schools' Championships the standard of our girls' play was much higher than usual, thus we find, in the doubles, Jean Laking and Audrey Gilpin reaching the semi-finals. The other girls who entered, also showed considerable skill in "handling the racket."

On the 8th April the Pukekohe Technical College tennis girls spent a very enjoyable day with us. The games were played on the Domain Tennis Courts. The singles matches resulted in a win for Pukekohe 7-5, while the doubles were 4-2 in our favour.

Many a hard game is fought between the Houses during the season and when it comes to the school championships at the end of the year the games are still more closely contested.

## CRICKET

During the first term we migrated in unprecedented numbers to Remuera Sports Grounds every Tuesday afternoon, and passed a pleasant two hours on the green. It was found that most of the first year girls had never before even handled a bat, and it was felt that the term could most profitably be given to coaching.

When we resume the game we shall feel, if the results of special tuition are as fruitful as they proved in basketball, that the first term has not been wasted. On the other hand we shall play more keenly and enjoy our House matches far more, with the knowledge that we are not now entirely ignorant of the finer points of the game, and the confidence that we are on the way to becoming cricketers in every sense of the word.

## SWIMMING

As always, the swimming girls have taken to the water like ducks. This is true in more ways than one, as most of them appear to do much cackling on the edge of the bath before taking the plunge. Many previous non-swimmers are now proud of their first strokes, due perhaps to the fact that they fell, quite by accident, into the deep end. The swimmers are divided into three squads, the main object of each squad being to see how long it can remain in the water after the whistle has blown.

Some enterprising people are endeavouring to gain their bronze medallions. Miss Brockett gave some assistance in various methods of life-saving. One part of the practice appears to consist of diving down for a brick and coming up with as loud a splutter as possible, tow it to the side of the bath with eyes tightly clenched, hold it up for one triumphant moment, only to commit it once more to a watery grave.

Now that the summer months have again come round, all squads are looking forward to their weekly dip, while those who were non-swimmers at the beginning of the year are anxious to see whether they have forgotten those elusive arm and leg movements, in which case they will have to line up at the side of the bath and practice the kick—very tedious! Most of us have decided that swimming, like most accomplishments, is not a natural gift, and as those who join the swimming squad are usually anxious to improve, they do not mind the exercises. Dressing is the worst part of all; our teacher cannot understand why it is that it takes us only five minutes to undress, and have a shower, and jump into the water, and nearly a whole half-hour to emerge with our clothes on. We say it is because we cannot get to the mirror, but most of us have visions of a nice little chat on the seats of our cubicles.

What a pity, it is that eating in the baths is strictly forbidden and enforced, as this would add greatly to our enjoyment.

—H. Carron.

A storekeeper had given a boy a simple job of sorting out some screws, but the boy had got them all jumbled and didn't seem to get the hang of what he had to do. The storekeeper had a wonderful flow of language and gave the boy the full benefit of it. He finished up by saying, "You'd get a scaffold pole in a tangle, you would!"

## SOMETHING SIMPLE

(Christian Science Monitor.)

That gentle rhyme which children know and which their elders sometimes repeat in surreptitious silence—"Thirty days hath September . . ." may fall into the valley of forgotten things. For September may cease to have thirty days. August, too, which was disarranged to meet the whim of a Roman emperor, may no longer have thirty-one. These and "all the rest" may have but twenty-eight days if simplification plans succeed.

For the present century is like a giant cash register in which Progress is constantly making change. The calendar, the King's English, arithmetic, city maps, weights and measures—none can escape the efforts of the simplifiers. Representatives of great nations sit in solemn conclave, lone inventors pursue their solitary research, all seeking to improve the methods of yesterday. Perhaps to-morrow. . .

The thing that upsets the calendrical apple cart is that the year blandly refuses to come out even. No matter how one divides up 365 days, five hours, forty-eight minutes and forty-six seconds, there always seems to be a tail end of the time left over.

These "left overs" confused even China in the "ancient of ancient" days when the Emperor Yao sat on the Dragon Throne. He gazed out across his palace courtyard and saw the flowers in bloom. Then he looked at the calendar and saw that it called for midwinter. Clearly, the astronomers had been careless with their fractions. So Yao summoned four brothers—two named Hi and two named Ho—and intrusted them with the task of putting the seasons in gear again. Thus China's present solar-lunar calendar began.

Julius Caesar was hardly more fortunate. He imported a mathematician from Alexandria who fashioned a new calendar and named July after his patron. When Augustus became Emperor, he decided to name a month after himself, so he tinkered with August a bit to give it as many days as July. But neither Julius nor Augustus knew that the expert had made an error of two-one-thousands of one per cent. The little percentages piled up for fifteen centuries until the world was ten days ahead of itself. Then in 1582, Pope Gregory XIII. stopped the leak in the hourglass by devising the Gregorian calendar which to-day records time for one-sixth of the world's population.

But the Gregorian calendar had its idiosyncrasies. The months are uneven and the days seldom bear the same dates; so that one can't follow the lineup without a score card. For a solution, experts of the League of Nations are going back to the old-fashioned bakers' dozen. They want the year to have thirteen months instead of twelve. Each month would have to be satisfied with twenty-eight days—exactly four weeks. The first of the month always would come on Sunday. One calendar would do for any month or any year, for all would be the same.

Yet a sharp pencil and a little multiplication disclose odd bits of time that must be taken into account. There's New Year's Day; it would be sandwiched in between the end of one year and the beginning of the next. There's leap year; an extra day would bob up in the middle of each fourth year. And those perplexing extra seconds; the world would let them catch up by forgetting about leap year once in every three centuries.

Simplified spelling, if not the sport of kings, at least has been the pastime of queens' chancellors and presidents. History, which has

a way of over-looking occasional important details, doesn't record whether Queen Elizabeth had trouble with her spelling. But her chancellor, Thomas Smith, made one of the first attempts to simplify English. Even Theodore Roosevelt took his pen and charged the ramparts of the lexicographers, coming within a consonant or two of lifting "ough" out of their vocabularies.

And now a brave professor from Sweden girds his linguistic armor about him and rides valiantly to attack Friday. He wants to spell it "Friedae." If he succeeds, the modern Websters will have to rewrite their dictionaries.

For there are only forty-two sounds in the entire English language, but 500 ways of putting them on paper. Professor R. E. Zachrisson, of Upsala University, selected one way to write each sound. He would spell height, "hiet"; ride, "ried"; and buy, "bie." Just to prove how easy it makes everything, he taught a class in English to read, write and converse fluently in twenty lessons. So now a number of prominent educators want his "Anglic" adopted as a basis for making English a universal language.

Do you remember the school days when A had so many apples and B had so many apples and you had to divide them into pecks and bushels until you didn't care if there never were another apple crop? They're reforming that, too! A humble decimal point is asking permission to take the place of most of the ordinary long divisions. It's already working at the job for twenty nations. But the United States and England still go into a mathematical huddle to change cubic inches into quarts.

The metric system got its start in 1799, when a French commission took a little piece out of the distance between the North Pole and the Equator and called this the meter. They divided it into tens and hundreds. They multiplied it by tens and hundreds. So when many countries want to change little units into big ones, whether in apples, milk or the distance from Bordeaux to Paris, a little itinerant period is all they need.

Still, all this doesn't solve the simple problem. "How much is one egg if eggs are \$1 a dozen?" That is the cue for "duodecimals" to make their bow before the footlights of simplification. Two digits would be added to the numbering system and the world would count by twelves instead of tens. Coinage would be revised. Eggs, at \$1 a dozen, would be worth a "duodime" or twelfth of a dollar each. Everything would be added or subtracted by the gross, which would make it exceptionally easy for the butcher, the baker and the radio-tube maker.

But perhaps one of the most far-reaching simplifications is the proposal to renumber everything from automobile plates to streets and houses. Its inventor claims that it would enable a stranger to find his way in any city without assistance. The stranger's directions might be as simple as:

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Without hesitation he would proceed to the City Hall, chosen as the central point in all towns. He would take the fourth street to the north. He would turn east and walk for sixteen blocks. Undaunted he would then turn north and walk for fourteen blocks, where he would encounter an alley which he would follow until he reached a house marked "k." The system tells everything but how to find the City Hall in the first place.

And so the world is becoming simpler and simpler. The experiment of yesterday becomes the accepted system to-day. To-day's innovation may succeed, or be forgotten, by to-morrow. Perhaps sometime the only thing left to do will be to simplify the simplifiers.



### JUNIOR BASKETBALL TEAM

Front Row: Miss Adams, J. Armour, L. Speed, J. McMahon, K. Weston, Miss Lee.  
Back Row: J. Speight, M. McMillan, L. Rudling, B. Campbell, G. Piper.



### COLLEGE TENNIS TEAM

Front Row: Lucy Craig, M. Waters, G. Wakefield, N. Waters, P. Perry.  
Back Row: Miss Vickery, A. Gilpin, G. Fisher, G. Docherty, G. Beer, J. Laking (absent).

## Boys' Sports Section

### School First XV.—2nd Grade.

The first fifteen has not completed the 1931 football season with the degree of success anticipated and hoped for so earnestly in their last contribution to the *Seddonian*.

However, the Goddess of Fortune certainly does not seem to have favoured them unduly. For one match their captain was missing through illness, for another their vice-captain, for another, two of their best forwards and so on; while in the Hamilton match, just as our forwards were beginning to wake up again, the referee blew his whistle—nine minutes before time—with a score for us fairly sure and only 3 points against us.

Still the winning of the game is by no means everything; in fact it is only a very small part of real football. It is the playing of the game, the team work, the good sportsmanship, the friendly feeling between the team members themselves that constitutes good football. Undoubtedly our boys have been well tested and tried in the latter respect, and have come through with flying colours. Their coach tells them that they have played great football, and in every respect upheld the honour of their School.

### RESULTS OF THE MORE IMPORTANT MATCHES.

#### Versus Hamilton Technical College. Lost 3—0.

As indicated above, the time factor was our strongest opponent. The Hamilton team was good, but the school feels that our team was better and deserved to win. But better luck next time. Hamilton at least went home feeling very pleased with themselves, and what could good hosts wish for more than that?

#### Versus Pukekohe Technical College. Lost 15—6.

Here Seddon were leading 6—5 till 5 minutes before time when Pukekohe put on 10 points in quick succession, mainly from penalties. It was a little unfortunate, but a good object lesson to all footballers on the need for avoiding infringements and on the necessity of learning the rules of the game perfectly. However, Pukekohe were without doubt the better team, and our boys deserve great praise for holding them in check so valiantly as long as they did.

#### Versus Auckland Grammar A. Drew 3—3.

The firsts were fortunate enough to meet this team on a really wet ground, and they took every advantage of that fact. The ground itself kept the Grammar fast men well in hand, while our hard working forwards and inside backs did the rest. Grammar's score again came a few minutes before time.

#### Versus Technical Old Boys' 5th Grade. Lost 11—5.

This was a friendly game arranged to complete the season, and arouse the interest of the members of the team in the Old Boys' Club. It was played in an excellent spirit throughout, although the standard of football was not of the highest. However, our boys soon realised that it would be well worth their while joining the T.C.O.B.R.F.C. when they left school, if only because of its close attachment to the school and the outstanding good-fellowship among its members.

## SECOND SCHOOL XV. 4th Grade A.

In the last number of the Seddonian a report was given of the progress of the team during the early part of the season. Until that time the team had been unfortunate in having players injured or ill. Luckily this did not continue and the team was able by consistent play to end the season as runners-up in the Fourth Grade A. Competition one point only behind Mount Albert.

In addition to the grade matches, games were played against Hamilton and Pukekohe, both of which were won. A detailed report of the latter match is given later.

In the final round of the grade the following games were played:—  
Opponents: Auckland Grammar B., drew 3 all; Sacred Heart, won 5—0; Mount Albert Grammar, drew 3 all.

All the games were well contested, the final game with Mount Albert to decide the Championship, being particularly strenuous.

## Versus Pukekohe Technical School.

This match was played at the same time as the senior game, on an adjacent ground.

As the teams marched on it was evident that the Pukekohe boys were a good deal lighter than our boys, and this accounted very largely for the score put up against them.

Pukekohe kicked off and for a few minutes carried play to their opponents territory. Seddon soon gained possession and a good combined movement allowed Beeston to score near the touch line. He failed to convert, the ball hitting the post.

From the next kick-off till nearly the end of the game, the Seddon players were in possession of the ball continuously, and managed to cross the Pukekohe line ten times. Beeston, speedy wing three-quarter, was easily the most frequent visitor to the Pukekohe line. Others who scored were Andrews, Borich, Carr and Coyle.

In spite of the weight and combination against them the Pukekohe boys played gamely. About ten minutes before time, good team work carried them well up the field and only exceedingly hard play by Seddon prevented them from scoring. When the whistle blew the score was Seddon 40, Pukekohe nil.

Mr. Drake was referee.

4th GRADE A. CHAMPIONSHIP  
THE FINAL GAME.

## Versus Mount Albert Grammar School.

It was a cold day and a strong wind was blowing. Mount Albert won the toss and played with the wind. The pace was hard, the two teams being about equal in strength. Play went up and down the field all the time. However, near the end of the first half Mount Albert managed to cross our line, making the score 3—0. Then a change came and the Mount Albert team was doing most of the defending until the end of the first half. In the second half the S.M.T.C. again did most of the attacking. Several free kicks were given against us, but fortunately none of them went over. Then Coyle, the centre, got a clear run but some how he was off side, when he received the ball. This was about half-way through the second half, the score being still 3 to 0. Then a Mount Albert man got off side in front of his own goal at the twenty-five yard mark. The kick was taken by Beeston who put it over and the score from 3—0 to 3—3. We gained hope then and the play was hard. S.M.T.C. were right on Mount Albert's goal line when the ball happened to go out, and the time was up.

## SCHOOL THIRD XV. 4th Grade B.

Members of the team were:—Backs, Raper, Oliver, Faithful, Buckle, Goldstone, Robinson, N. Rippon; Forwards, McCook (captain), McLellan, McCarthy, Wheelhouse, Smith, Cowan, Welsh, Robinson, O. Roseman, Page, Swindells. Bunker and McFarlane also played a few games for us.

The successes of the team have been rather more than balanced by our defeats, but one can see by the notes that we have played some evenly contested games. Owing to some members not being available on various Saturdays, it was difficult to field a fifteen that had an appreciable amount of combination.

Our thanks are due to Mr. James who has persevered with us.

The results of our matches this season were:—

First Round.—Versus Mount Albert Grammar B., drew 3—3; v. Auckland Grammar C., lost 3—6; v. Auckland Grammar D., won 8—5; v. Sacred Heart B., lost 0—13; v. Auckland Grammar B., lost 0—27.

Second Round.—Versus Auckland Grammar D., won 11—6; v. Auckland Grammar A., lost 3—29; v. Takapuna Grammar, lost 0—3.

## SCHOOL FOURTH XV. 5th Grade

Team: Lund (Captain), Hamlin, Carpenter, Clark, Clarke, Baird, Bilkey, Potter, Magill, Brady, Hammond, Naran, Lees, Anderson, Prenter, Sole, Powell, Bunker.

This team came very close to winning its grade in the Secondary Schools Competition, losing only one match. In the first round, not a point was scored against it, but in the final round we drew with the champions (Auckland Grammar) 3 all, and lost to Sacred Heart, 6—13. In the latter game, we were most unfortunate in losing the services of Baird, our star five-eighths, who was injured, and Clarke, our centre, who was ill. All our bad luck seemed to come in one fell swoop in this game, which we had to play with 14 men; in spite of strenuous endeavours to pick up in the second half, we could not overcome the initial lead. Sacred Heart obtained by a devastating attack from the kick-off, two tries being scored in ten minutes before our forwards could find their feet, so to speak.

Summing up, it may be said that some excellent contests were provided, the most exciting being those with the grade winners, Auckland Grammar, the first of which we won 8—0, and the second drew 3—3. The strength of the team lay in the forwards, and it was considered that they were the best in the grade. Brady, Lees and Anderson did particularly fine work, while the others all did their share. The backs were disappointing, though there were individual flashes of brilliance, but generally they did not achieve the combination expected. Hamlin and Baird were the most reliable, and Magill made a first-class wing-forward. On defence, there was no fault to be found, both forwards and backs following up well and usually tackling correctly, but on attack, perhaps partly to the good defence of our opponents, generally speaking, good team movements were not frequent. However, the games were all played in a friendly, sporting spirit, and the team did honour to its School in finishing runners-up in the grade.

Results:—

First Round.—Versus Sacred Heart, won 19—0; v. Takapuna Grammar, won 17—0; v. Mount Albert Grammar, won 11—0; v. Auckland Grammar, won 8—0.

Final Round.—Versus Auckland Grammar A., drew 3—3; v. Sacred Heart, lost 6—13; v. Auckland Grammar B., won 9—0.

Summary: Won 5, lost 1, drew 1; points for 73, against 16.

## SCHOOL FIFTH XV. 5th Grade A.

This year we had a very successful season, winning every game we played and thus winning the championship. This success was due chiefly to a fast and clever set of backs, but due credit must be given to the forwards for some excellent displays.

Games not previously described are:—

**Versus Takapuna Grammar.**

In this game we had no difficulty in winning by 21 to nil. Phillips, Mendelssohn and Richards headed an active bustling set of forwards. Tries were scored by Phillips (2), Mendelssohn, Seagar, and Marr. Jackson converted three.

This concluded the first round, in which we won the five games we played. The four teams left to fight out the finals were Mount Albert A., Auckland Grammar A., Auckland Grammar C., and ourselves Technical A.

Games of the final round:—

**Versus Mount Albert A.**

We started this game in great style. Wakefield and Seagar scoring tries in the first ten minutes. But for the remainder of the game it was all we could do to maintain our lead, Mount Albert scoring once and pressing hard several times. Mendelssohn and Flynn played splendidly against the onslaughts of the opposing pack. Neither set of backs were spectacular, due chiefly to unchecked offside play by forwards. We won 6—3.

**Versus Auckland Grammar C.**

This was a walk-over. We won 35—0, even though short time was played. Tries were scored by Wakefield (3), Bowery (3), Seagar (3) and Mendelssohn (2).

**Versus Auckland Grammar A.**

Victory in this game gave us the championship, so both teams were all out, and a thrilling game resulted. Half time brought no score, the game being mostly a forward one. In the second half both sides scored early, and for the rest of the time we made attack on attack at the opponents' line, all being unsuccessful till, one minute before time, Marr, following up fast, dived on the ball and scored, giving us the game by 6 to 3. Our first score was a splendid effort by Phillips.

This game was a fitting conclusion to an enjoyable season. Our record is as follows:—

Versus Mount Albert A., won 6—3; v. Auckland Grammar A., won 9—0; v. Sacred Heart A., won 24—0; v. Auckland Grammar B., won 40—0; v. Takapuna Grammar A., won 21—0; v. Mount Albert A., won 6—3; v. Auckland Grammar C., won 35—0; v. Auckland Grammar A., won 6—3.

Matches played 8; won 8; points for 147, against 9.

The team: Seagar (captain), Mendelssohn (vice-captain), Marr, Richards, Jackson, Wakefield, Phillips, Bowery, Dale, Doughty, Bindon, Smith, Flynn, Green, Beard.

## SCHOOL SIXTH XV. 6th Grade B.

The close of the football season left the Sixth Grade B. team certainly more in honour than in disgrace. It did not win a competition but was beaten only once by a team in its own grade during the season. The members of the team deserve praise for the manner in which they conducted themselves, their excellent attendance and rigid punctuality at all matches. Three of the B.'s were chosen to play for the 6th A. team in the second round of the competition, these were, Smith, Bindon and Davies. The B. team extends its congratulations to them for having played an important part in the final issue, that of helping the A's to win the 6th Grade Rugby Competition.

The games played are as follows:—

Versus Grammar D., won; v. Mount Albert B., won; v. Technical C., won; v. Grammar C., lost; v. Mount Albert C., won.

## SCHOOL SEVENTH XV. 6th Grade C.

During the early part of the season the team did not meet with much success, chiefly owing to the fact that only fourteen players were available at the best of times. However, the team played a good losing game, and will make good material for a higher grade next season.

Towards the close of the season we were strengthened by re-arrangement between the teams, with the result that a much better showing was made against the stronger teams, and we had a well-deserved win against Mount Albert in the last game, which was a fitting close to the season.

Results of games played:—

Seddon Memorial Technical College C. v. Auckland Grammar School C., lost 23—0; Seddon Memorial Technical College C. v. Mount Albert Grammar School B., lost 8—0; Seddon Memorial Technical College C. v. Seddon Memorial Technical College B., lost 8—5; Seddon Memorial Technical College C. v. Auckland Grammar School D., lost 6—3; Seddon Memorial Technical College C. v. Takapuna Grammar School lost 8—0; Seddon Memorial Technical College v. Mount Albert Grammar B., won 21—3.

The outstanding players of the team have been Newbold (captain) and Shilling, while Haswell, Young and Abbott contributed well in the later games.

—J. Brooke.

## REPRESENTATIVE ASSOCIATION FOOTBALL.

Four members of the senior team and three of the juniors were selected to represent the Auckland Secondary Schools at its tourney held during the term holiday, representative teams from Wellington, Wanganui and Palmerston North competed in the Tourney for the Skerrett Cup. Auckland and Wellington played a drawn game and are joint holders of the championship, each to hold the cup for six months.

The following boys were selected from the College, Seniors.—J. Dallimore, N. Dallimore, E. Flyger and A. Flyger; juniors.—P. Best, N. Dixon, J. Hellyar. To these boys we offer our hearty congratulations.

The Tourney proved a great success. The visitors, 60 in all, were billeted and entertained by local Secondary School boys.

## ASSOCIATION FOOTBALL

This year owing to increased numbers at the College we were able to enter six teams in the Secondary School competitions. The standard of play this year has been considerably higher in all the Secondary Schools. This was expected in view of the fact that boys unable to obtain positions stayed on at the various schools.

The senior team under the leadership of J. Dallimore met with a fair measure of success. Mount Albert Grammar again proved to be our strongest opponents. We were successful in defeating their A. team once during the season, and so broke their record as an unbeaten team for two seasons. We finished the season as runners-up in both the competition and the knock-out championship.

Much of the credit for this season is due to the defence. The boys played a very consistent game throughout, and it is difficult to pick out players for special mention. The Dallimore Bros. proved a tower of strength, E. Flyger as left fullback saved the team many times by his strong kicking and abundance of energy. Pollitt was also very safe in goal.

The forwards seldom combined very well though their individual play was good. This was mostly due to the numerous changes we made in our effort to find a centre-forward who could goal. A. Flyger proved the most successful in this position.

The team: J. Dallimore (captain), E. Flyger (vice-captain), N. Dallimore, A. Flyger, Pollitt, Stuart, Collins, De Suza, Jones, Mitchell, McMeechan, Wallis.

## Results:—

Versus Mount Albert B., won 2—0; v. Mount Albert A., lost 5—2; v. Auckland Grammar, drawn 2—2; v. Mount Albert B., won 3—0; v. Mount Albert A., lost 3—0; v. Auckland Grammar, won 2—0; v. Mount Albert B., lost 2—1; v. Mount Albert A., won 2—0; v. Auckland Grammar, lost 3—2.

## Knockout Championship results:—

Versus Mount Albert B., won 2—0; v. Mount Albert A., lost 2—0. Games played 11, won 5, lost 5, drawn 1.

## Intermediate A. Team.

This team with P. Best as captain played some fine games against a very strong opposition. This grade was a particularly hard one this season. Although the team lost more games than they won it was not due to lack of interest or team spirit. The experience gained, together with physical benefit obtained, made the season a most enjoyable one. The outstanding players of the team were Best, Discon, Grogan and Hellyar.

## Results:—

Versus Kowhai J. H., won 4—0; v. Auckland Grammar, lost 4—1; v. Takapuna Grammar, lost 6—0; v. Mount Albert A., lost 3—1; v. Kowhai J. H., won 2—0; v. Auckland Grammar, lost 5—1; v. Takapuna Grammar, lost 5—1; v. Mount Albert A., won 1—0. Games played 8, won 3, lost 5.

## Intermediate B. Grade.

Two teams were entered in this grade: Intermediate B. and C. We experienced quite a lot of difficulty during the season in not being able to fill a full team. This was due to minor accidents and boys leaving the College. Considering the limited opportunities for practice, the standard of play was quite creditable.

## Results:—

Versus Mount Albert C., won 2—0; v. Technical C., lost 2—0; v. Mount Albert B., lost 2—0; v. Mount Albert C., won 3—1; v. Technical C., lost 1—0; v. Mount Albert B., drawn 1—1; v. Mount Albert C., drawn 0—0.

Games played 7, won 2, drawn 2, lost 3.

## The C. team results:—

Versus Mount Albert B., lost 11—0; v. Technical B., won 2—0; v. Mount Albert C., won 1—0; v. Mount Albert B., lost 2—1; v. Technical B., won 1—0; v. Mount Albert C., won 2—1; v. Mount Albert B., lost 4—0.

Games played 7, won 4, lost 3.

## Junior A. Team.

This team brought a great deal of credit on itself this season, they were in fact the most successful team we had. Mount Albert again provided us with our best and most interesting games. Strange to relate we played three drawn games against them, and it appeared impossible for one team to beat the other. The Minor Division Committee ruled that Mount Albert A. and our Junior A. team were to be bracketed as joint holders of the Junior Championship. The outstanding players were Horner and Commell.

Versus Sacred Heart, won 6—0; v. Kowhai J. H., won 4—0; v. Technical B., won 5—0; v. Mount Albert A., drawn 1—1; v. Mount Albert B., won 2—1; v. Sacred Heart, won 5—0; v. Kowhai J. H., won 3—1; v. Technical B., won 9—0; v. Mount Albert A., drawn 2—2; v. Mount Albert B., won 4—0; v. Mount Albert A., drawn 1—1.

Games played 13, won 9, drawn 3, lost 1.

## Junior B. Team.

The main object in entering this team was to give the boys their opportunity to gain experience in the game, in most cases the boys had never played before, and as the season progressed their play showed a marked improvement.

The outstanding players were, Christie, Hodder, Thomas and Wolfe.

## CADET NOTES

The most important event in connection with the Cadet Battalion this year has been the establishment of specialist units. The first of these was an Ambulance Bearer Section, to which were drafted those boys who had some experience of first-aid, e.g., as received in the Scouts. A Signals Unit was next to be formed, with Mr. Brooke in charge; the keenness of Mr. Brooke and his boys resulted in some of the unit spending a week of the September holidays in an instructive camp on Rangitoto. Mr. Taylor assisted by Mr. Martin, has established a Vickers-gun section, and a Lewis-gun section. These specialist units will be reserved for those who show special keenness in their drill and intend to remain at school at least three years. The work of the Defence Office staff in training these specialist squads, as well as the four companies is very greatly appreciated.

Mr. Thompson has been gazetted Lieutenant, and Mr. Adams and Mr. Leeves, 2nd-Lieutenants. Mr. Carnahan has joined the unit and is assisting Mr. Leeves with D Company.

On Tuesday, 1st September, of the second week of the holidays, about 80 boys spent the day at the Penrose Rifle Range, when classification and practice firing was carried out. Members of the Vickers and Lewis gun sections were both given demonstrations and actual firing with the guns at tiles at 400 yards.

Use is being made of the miniature range at the Drill Hall after school and on Saturday mornings. Teams have been entered from A, B and C Companies for the Weekly Press Shield.

## SIGNALLING CAMP

During the August holidays a squad of ten signallers under the supervision of Mr. J. Brooke, spent a week at Rangitoto Island, for the purpose of individual instruction.

Through the generosity of Captain Clifton, everything possible was made available for our use, both signal gear and camp necessities.

Two huts about 100 yards apart were obtained at Saltpans Bay, near the Lighthouse. The detachment consisted of six Technical College boys and four Takapuna Grammar boys, and these were again divided into four squads.

Part of the day was spent in signalling, chiefly with flags, and at night the lamps were used to communicate with signallers at Narrow Neck. For the rest of the day fishing and boating was indulged in.

We woke in the morning with the sun gleaming in our window, and the seagulls crying outside; while we retired at night with a great crackling fire blazing in our open fireplace. We rose to find a hearty breakfast prepared by the cook and O.C., and then girded on our instruments of war for the day.

Thrice did we conquer the great soaring peaks of Rangitoto, with the loss of large quantities of perspiration and bootleather, although several times landslides threatened to dash us to the rocks below.

Once here we split up into our four parties and dispersed to carry out a sham battle. The Takapuna army, under Major Lockwood, was sighted and their signals intercepted, after which a glorious victory was celebrated by Technical College, under General Rippon. Takapuna had its revenge at a later date.

The huts were connected by telegraph and telephone, and although these were convenient to worry the cook and ask, "Is dinner ready yet?" they were also used at every odd moment for Morse practice. They too, proved very interesting on the last night to broadcast the noise and happenings of an actual siege.

At night, wrestling and boxing contests were arranged, and although Takapuna took the honours in boxing, a good win was scored by Technical in the wrestling.

Some of the signallers got a bit more excitement than they wanted during some of the boating trips, but no one was sea-sick.

A raid on the last night concluded proceedings, when Takapuna Grammar half drowned our detachment with water, and had to be driven off in a like manner by our O.C., to be dragged home to bed after a decisive defeat.

The next day was the last, and most of the time was spent in packing up. Two of our engineers spent the morning dismantling an old engine, and nearly caused a marine disaster by dumping a few hundredweight of old iron in the bows of one of our boats.

We arrived back at Narrow Neck safely after a rough trip, and so ended a most enjoyable and instructive holiday.

The detachment wishes to express its deepest gratitude to Mr. Brooke for providing it with such a happy instructive camp which called for considerable work, organisation, and sacrifice of holiday time on his part.



## FIRST SOCCER XI.

Front, Sitting Down: E. Jones.  
Front, Sitting: D. Mitchell, J. Dallimore, Mr. Leeves, E. Flyger, E. De Suza.  
Back Row: R. Collins, A. Flyger, J. Pollitt, D. Stuart, H. Dallimore, W. McMechan.



## GYMNASTIC TABLEAU

Top Row, Left to Right: J. Robinson, L. George, H. Dallimore, Mr. Leeves, J. Dallimore, S. Town, M. Waretini.  
Middle Row: S. Brewer, C. Pickering, J. Fraser, R. Skyrme, H. Short, E. Raper, L. Faithful.  
Bottom Row: N. Wilson, R. Fraser, Tonkin, Stevens, Whaley.

### SWIMMING, BOYS' CLUB

The swimming squads have made steady progress, and, although the squads consisted chiefly of beginners and learners, Swimming Certificates have been gained as follows:—One mile, 6;  $\frac{1}{2}$  mile, 8; 1-4 mile, 10; 220 yards, 6; 100 yards, 5. Besides being taught to swim, style has been improved, the boys being taught how to swim strongly with a minimum of effort.

A squad of 18 boys was trained for the Bronze Medallion of the Royal Life Saving Society, and a further squad is now under training. The first squad gained high praise from Mr. M. Champion, the chief examiner who reports: "I am very pleased to see how well the boys did the land drill. I have no faults to find. The water work is very good indeed, but the boys are inclined to race one another, and that should not be in life-saving. I am delighted with the answers to the questions asked on resuscitation. Every answer was given correctly and quickly. The object diving was a treat to me. I must thank those who have had the boys in the life-saving work for the quick and efficient way the work was done."

### BOYS' TENNIS

This year tennis was introduced as a regular part of the Tuesday afternoon sports' programme. As most of the players are beginners, they display rather more enthusiasm than ability; although, no doubt, the former quality will produce the latter. About six boys entered for the Secondary Schools' Championships and, while not successful, gave quite a good account of themselves. In the senior event our chief hope was George, who was, however, eliminated in the early rounds. Among the juniors, Giles won his way to the semi-final where he was defeated by the ultimate winner after a very close game. Some of the younger players entered, not in the hope of winning, but with the idea of gaining valuable experience which we hope will manifest itself in greater success next year.

It is proposed to hold a tournament to close the winter season but the unfavourable weather and the prevalence of influenza have caused the postponement of the event which should take place during the next few weeks. At the end of the year a School Tournament will be held, and, as a prominent Auckland Club is considering offering free membership to our two most promising players, this should invest the event with still further interest.

We have several distinctly promising juniors who are very keen and enthusiastic, so that we hope, in time, to see the standard of tennis raised to such an extent that we will be able to compete, on at least level terms, with the players of other secondary schools.

### THE GYMNASIUM

Since the commencement of the second term the boys gymnastic and physical culture classes have been conducted in the Artillery Hall, the apparatus from the College was installed during the term holiday.

We feel justly proud of our gymnasium which is considered to be one of the best equipped in Auckland, most of the apparatus was made in our Woodwork Department. During the past 2 $\frac{1}{2}$  years no less than 650 boys per week have been instructed in gymnastic work, during which period only two minor repairs have been necessary. This statement itself reflects great credit upon those responsible for making the apparatus. Each class is marched to and from the Gymnasium under its own class sergeant, he being responsible for the good order and discipline until he hands them over to the Instructor.

The boys are trained in all forms of apparatus work, also boxing, tumbling, club swinging and physical culture. Various lectures are given on the minor and major rules of health suitable for boys of secondary school age.

Boxing, Gymnastic and Badminton competitions are organised annually. The inter-House Gymnastic competition offers every boy his opportunity to gain points for his particular House and is more or less an examination of the year's work.

The boys display a very keen interest in all the various forms of training and competitions and have shown a very satisfactory physical improvement.

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### BADMINTON

Students of the College have received instruction in this popular winter sport. Badminton is an expensive game, but in our case we are fortunate in being able to overcome the most expensive item, namely hall rental, and at the same time have one of the best Badminton courts in Auckland. Other expenses for racquets and shuttlecocks are paid by those who actually take part in the game.

The members of the staff have organised groups of players, and many enjoyable evenings have been spent during the winter months.

The prefects have a well organised club under the leadership of J. Dallimore. Boys other than prefects are welcomed to this club which has a limited membership of thirty; the boys have made great progress in the game and are in splendid physical condition.

The evening gymnastic classes are taught Badminton as part of their training. The Friday evening class became affiliated to the N.Z. and Auckland Associations'. Inter-club matches were played and we were successful in winning our particular grade. This entitled us to compete in the Dart Shield Competition in which we were successful in reaching the semi-final after having defeated Northern A.

Parnell, the champions, defeated us in the semi-final by 11 games to 1. In this game we gained valuable experience in the finer points of the game from the N.Z. and Auckland champions. Most of the sets were very evenly contested. In some cases we lost by the odd point in 21. Against Messrs. Martin and Rishworth, the present N.Z. doubles champions, Messrs. Speed and Crawford gained 14 points in 21, and Messrs. Leeves and Sloan 18 in 21. Against Messrs. Southern and Elliott the Auckland doubles champions, Messrs. Speed and Crawford gained 17 in 21, Messrs. Leeves and Sloan 20 in 21.

The season proved most enjoyable and instructive to our students, also a social success which is equally valuable in the training of youth. Heartly thanks are offered to Miss Seay for excellent supper arrangements.

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Advertising for a slogan, a company which manufactures soaps and perfumes got this: "If you don't use our soaps, for heaven's sake use our perfumes."

### THE MYSTERY OF WORDS

(Adapted from the "Christian Science Monitor.")

Romantic poets and sentimentalists try to make us believe that only children are capable of wonder, but the mysteries of this world are not as superficial as this theory would indicate. The fact is that children take almost everything for granted and therefore wonder scarcely at all. Nothing is really mysterious to them, because they do not know enough to realise their own ignorance.

Suppose we tell a child that the name of a certain domestic quadruped is "cat." When he hears that monosyllable, does he whom Wordsworth calls our "best philosopher" suddenly recall, as the scholar may, that the name was first spoken beside the Nile thousands of years ago, when animals of this species originally took up their abode with man? And does he know that the word has been used in almost every European language ever since, showing that the animal was introduced from Egypt into Europe? Not at all. Quite undisturbed by all such lore and amazed at the power of a three-letter word to guide us through labyrinths of commercial history and exploration, he is at first wholly absorbed in the effort to pronounce the syllable, and his effort is for some time ludicrously unavailing.

This fairly obvious fact is worthy of mention, not merely for the correction of a sentimental attitude toward childhood, but also because it may suggest that, if we ourselves do not deeply feel the mystery and strangeness of words, the reason lies not in our superior knowledge but in our ignorance of them. If words do not amaze us, it must be because we take them for granted, as the child does. Never is it the great linguist, master of many languages, who ceases to marvel at words. Rather, he is just beginning to comprehend what wonderful things they are.

For consider: do we know where words came from? Have we any defensible theory about the bridging of that mighty chasm between the gibbering of the ape and the speech of Demosthenes? Scholars have advanced a dozen hypotheses concerning the origin of language, and they are about equally absurd, far-fetched, unsatisfactory. One who has examined them all is at length ready to admit that he does not know how words first came to be. Their very existence is mysterious. What towering intellect was it, then, that produced this most perfect of all mediums of human expression? It was not any one man who did this but thousands and millions of men and women and children, all of them utterly illiterate, quite unschooled, wanderers on the face of the earth and dwellers in the wilderness. And they did not perform the feat in one vast convention. They worked one by one and far apart not knowing one another, and not one of them ever guessed that he was helping to form and frame the human language, without a plan, without a leader, without even any clear intention, they made language ready for us, able to bear the heaviest burdens of meaning that words have ever borne and able to soar also on wings. It is almost as though ten million men stumbling blindfolded through a wilderness should each throw a stone at haphazard, and that then, long after they passed by it should be found that they had built a temple. There is a wonder, though not one suited to childish comprehensions. And there, certainly, is one of the most amazing feats that we have performed on this planet.

Words, we observe, have experiences as unpredictable as those of sealed bottles tossed overboard in mid-ocean, to ride the waves perhaps for centuries and to come to rest where no man knows. Yet in everything they do, or rather in all that is done to them, one discerns the

pressure of humanity upon them. They reflect us at times like mirrors, and they do not always flatter. What are we to infer concerning the employers of the past from the fact that the strong dark word "villain" once meant nothing more than a hired man working on a farm? And what trait are we to suspect in city dwellers when we learn that a "pagan" was originally nothing but a villager, and that a "heathen" was one who dwelt on the heath? Words are strange, partly because we are.

We made them, somehow, or so we say. Why, then, will they not obey us? Why will they so frequently say the thing we do not mean and convey a sense we could not possibly have intended? Ah, the care we take with them—or should take! Yet it is never quite enough. They may be our children, but they are not quite our servants, and they have careers of their own. But even as our children they ought at least to come when we call, and they do not always. Occasions arise when we need them greatly, when we simply cannot do without them, and then we may shout commandingly or croon a dulcet invitation all in vain. For a whole day or a week they may hide themselves, and then, when we have almost despaired of them, they are suddenly all about us in droves.

All these derelictions are soon forgotten and forgiven, however, when we think what they have done for us, as though of their own accord and without our suggestion or connivance. Shakespeare once dipped his quill and poised it for an instant above the paper, and eleven words crowded down from the point. Short and simple words they were, but since that moment they have flushed ten million faces and made starry many millions eyes, for the words were these: "Night thickens, and the crow makes wing to the rooky wood." Pure magic one sees. John Keats once took a mouthful of air and shaped it into "magic casements opening on the foam of perilous seas, in fairy-lands forlorn," and since that moment the world has never been quite the same that it was before, at least for some of us. Strange, it is that such a brief succession of spoken sounds, frailest and most transitory of all imaginable things, should make such a difference, or any difference whatever. But then words are strange, and they have done many such things as these. More than any other instruments or tools we have, they have helped us in our long upward climb. We have striven with them and grown strong thereby. We have wrestled with them as though they were veritably the angels that they often seem to be. The toil has been tremendous, but the rewards have been beyond all expectation or hope.

#### An Essay on Breathing by a Little Boy

Breathing is made of air. We breathe with our lungs, our lights, our livers and our skin when it is not all stopped up with dirt or dust or powder. If it wasn't for our breath we should die when we slept. Our breath keeps the life a-going through our nose when we sleep.

Our nose was made for breath, and our mouth for food and to talk. People in a room make bad foul unholy some air. They make carbonic acid. Carbonic acid is poisoner than a mad dog. A heap of soldiers was in a black hole in India and a carbonic acid got into the hole and killed nearly everyone before morning.

Girls and women kill the breath with corsets and squeeze the diagram. Girls can't holler or run like boys when diagrams are squeezed too much. I'd rather run and holler and breathe the lots of air and have bright eyes and rosy cheeks and a good appetite and a good diagram.

Give me air or give me death!

## Boys' Form Notes Section



### ENGINEERING 1.

Approximately ten months ago forty carefree and innocent youths first entered a certain school. Their peaceful brows were unwrinkled by care; algebra, electricity, geometry were mystic words filled with the glamour of the unknown.

Let us look at them now. Let us follow them through their daily routine, and mark carefully their progress along the arduous path of education.

First we see them probing the mysteries of science. Here our glance strays to two earnest youths investigating the remarkable property of a mirror in reflecting the sun's rays. Their names, on enquiry, prove to be Pooley and Philpot, both destined to make their marks in the world. Elsewhere we see a group of workers studying the action of mercury on the coin of the realm, later to reach the ever-open coffers of the Pupils' Sports Fund.

After one and a half hours, ten minutes interval is taken, to restore the tissues for the work ahead.

Ascending one floor higher, we find them now deep in earnest conversation in a tongue we do not understand. Two obviously intellectual youths, distinguished by the brighter colour of the hair, are completely ruining what comeliness of countenance they possess by heroic efforts of pronunciation. In this room we observe some species of round game, but the working was too intricate for our comprehension.

The study of the native tongue follows; here we note the predominating intelligence of two: one with a name we immediately recognise as one of the most ancient in the world, connected with the immortal story of Pharaoh's daughter and the bulrushes; the other with a peculiarly suitable name in that he is very inclined to "chatter."

This is succeeded by a spell of 45 minutes, when the base material needs are satisfied. We note here some interesting exhibitions by one, D'Almeida, of pugilistic temperament, demonstrating some new torture devised evidently by a fiendish mind. Exempt from his attention is a tall, sleek youth, Fenner, who is reputed to have a knowledge of jiu jitsu.

We see nearby a quartette known as the "four Macs," whose unwonted docility is explained by the fact that the generous McPhail has bought a farthing chocolate fish, which distributed among his companions has found its way to their capacious mouths.

Later we see them absorbed deep in abstract mathematical thought. Peeping over the shoulder of a snub-nosed student, Smith, we are immediately lost in a maze of "x's" and "y's". Near him we see Carpenter, himself lost in a similar maze made all the more difficult by the peculiar blotches which adorn his work. We refrain from comment, however, not wishing to awaken a curly boy, whose chief fame consists in being first on the register.

Then we pass to yet another scene, where excessive zeal with handkerchief and nasal organ earn dire punishment for Gee. Anxious glances out of the window by Carr are eventually explained by the presence of the Town Hall clock.

Last of all they study the mystery of the ages, both in their native land and that of their forefathers. Here we note the exceptional qualities of a certain Carroll, who, between snatches of lunch left over perhaps for this purpose, gives the most astounding answers, each one to cause another grey hair.

Now they leave, their brows assuming once more some of the serenity that marked them in their childhood days, now long forgotten.

### ENGINEERING 2.

1931 began with a 10 per cent. cut, Engineering 2 having reduced from 40, to 36 members. Before many weeks had passed we were thoroughly initiated and were enjoying the privileges of being second year students. Work the 1st term seemed rather difficult, for not only was the holiday spirit still keen in our veins, but the ways of our new teachers puzzled us. Things brightened somewhat, however, when one day we were told to gather and sell any bottles that we could find as we were to be entertained by a ventriloquist. This gentleman showed much skill, we thought, despite the fact that his tie would not keep still owing to his tight collar and the uncontrollable movement of his "Adam's apple."

The second term began with us having a better knowledge of our teachers and of our school work. Our ability in the gymnasium, however, lessened slightly, owing to "gym day" often happening to be "Doctor's day," but this did not worry us as we knew that when we went, we would invariably obtain much amusement from the graceful spectacle made by "Tubby" performing a perfect "nose dive" from the "horse" on to the mat. At exams, our ability could not be "damped" even though we then had concrete mixers, pneumatic drills and workmen, around us, all of which delighted in making a noise.

Although we are examination pupils, we do not always sit at home and "swot," but are able to take our place in many of the school teams. No members of the class has yet found his way into the 1st XV., but several quite deserve the place they have obtained in the 2nd and 3rd Rugby teams, while the few Association footballers are not to be smothered into the lowest grade. Not only are members scattered around the various school teams, but when they combine to make a class team they have been proved about equal to the 1st XV. One Tuesday afternoon after some strenuous House matches Engineering II, filed out on to the field of play. They were wearing a weird collection of jerseys, evidently donned to dazzle the eyes of their old rivals B.T. 2., but even with the "colour scheming" they were unfortunate enough not to be able either to score or to prevent scores. The final figures of the game were 6-0 in favour of B.T.2. who, we are beginning to think must after all be able to play to Technical standard and not merely that set by other secondary schools.

In cricket too, we should all like to follow the noble lead given us by one of our worthies, but find that most of us have to be content with something lower than 1st grade cricket. Some class members suggest that we should start a Miniature Cricket Club in the school grounds themselves—a marble being used for a ball—and so have tuition in the art of bowling and of catching, if not in batting.

### ENGINEERING 3.

It may be observed that these notes do not begin with some daring "war-cry," some "animal alphabet," or other introduction to the record of the form. Not for us are these wild sayings or childish mutilations of the alphabet. We are simply "The Foremost Form." Those, in this most select Form, to whom we raise our hats are the girls—three in a class of thirty boys, the last girls, perhaps, to be members of the Engineering Form.

The prefect, Nellie Hodsdon.

The four councillors, Paquita Corbin, Edna Perrin, E. W. de Suza, W. Stevenson.

The member of the 1st Rugby XV., W. Stevenson.

The three members of 1st Soccer XI., E. W. de Suza, H. Jones, McMechan.

The member of 1st Cricket XI., E. W. de Suza.

The senior athletic champion, W. Stevenson.

The head girl of Seddon House, Nellie Hodsdon.

The head girl of Wellesley House, Edna Perrin.

The N.C.O.'s, C.M.S., E. Grant; Sergeants, E. W. de Suza, W. Stevenson, McMechan; Corporals, T. Robertson, T. Meikle.

The ex-champion gymnast, Jimmy Johnston.

The holders of the Life Saving Medallion, T. Robertson, M. Mason, A. Carr, O. White.

The member of orchestra, A. Carlaw.

As we are sitting for the University Engineering Preliminary Examination at the end of the year, all are paying strict attention to work and making full use of spare moments. Even when masters are not with us we find something to do and our silence may be heard throughout the corridor!

Recently one member of the class acquired the position of Laboratory Assistant. Immediately some misguided members of the form raised the question as to who was to pay the fares in order to get to that youth's home to use the apparatus. This same boy was absent one day recently and some witty person suggested that he was stock-taking!

At the recent Inter-House sports' meetings the members of the form "showed up" quite well—especially the one who lost half of his two piece bathing suit in the diving competition. Other successful competitors were J. Johnston, T. Robertson and M. Mason. Stevenson won the Senior Championship at the athletic sports.

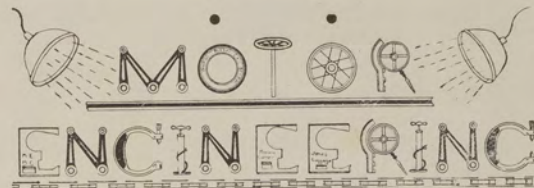


#### ODE TO THE EMINENT SCIENTISTS

Hail to glorious E.4!  
 Shame t'would be to see  
 Notes to every other  
 Ne'er a verse to thee,  
 Hail to brilliant E.4!  
 That form so bright and sound,  
 With Cowperthwaite as prefect  
 Most famous and renowned;  
 Bedbrook plays the trumpet,  
 Swindells plays the fool,  
 Stuart carries notices.  
 Around the giddy school,  
 Tired we are of swotting,  
 Tired of working hard,  
 Tired of always straining,  
 And being on our guard;  
 Tired of listless dreaming  
 Through the lazy day  
 Till the bright vacation  
 Turns us out to play.

#### EPITAPH.

But:—We passed Matriculation,  
 Good luck to us we know;  
 It was the fruit of labour.  
 The seeds we did but sow.



To-day motor transport is of paramount importance to the community. It is evident, therefore, that in a school like the Seddon Memorial Technical College there should be a course open to boys who wish to become motor mechanics. This need was met last year by the establishment of a Motor Engineering Course. While not neglecting the general education of the boys, the training has a decided bias towards the trade's side. Altogether nearly 50 boys are working at this course and there is no doubt that the number desiring to enter it will increase yearly.

Practical work is a feature of the trades department and a well-equipped workshop caters for the training of the boys in this direction. In the store-room is a wide range of every kind of tool needed for the work.

Among the select little band of eighteen in M.E.2, are some noted characters:—

1. "Ingot" Naran, the Hindu youth, who, it is believed, swears at his teachers in Indian. He is certainly known to carry about with him the book written in Hindustani.
2. "Click" Clarke who is probably a lincal descendant of Stentor, the Greek with the loud voice.
3. "Spud" Murphy, well-known for his "Irish whisper." It is rarely, indeed, that his voice can be heard.
4. "Eggo" Evans whose well-parted hair and tidy appearance are the envy of his class-mates.
5. "Nooky" Manoak, the "tarzan" of the class who is a member of the 1st XV. According to him the masculine corresponding to "prima donna" is "prime minister."
6. "Sixer" Smith who is so tall that the small boys have to shout so that he can hear them. Littler and How believe that there is snow on his hat but this cannot be proved.

M.E.1, is well represented in the field of sport. In the 1st XV, is A. Pooley while Carr and Short play for the 2nd XV. Beard is a member of the 6th Grade A. team which had the distinction of winning the grade without a single loss. Boys from M.E.1 figured prominently in the school cricket teams. In swimming Beard and Shilling performed well at the Annual Sports, and the former together with Pooley has passed the test for the Bronze Medallion of the Life Saving Society. Clanfield and Kneebone are members of the Trumpet Band while Short plays the "baronet" (?) in that important unit of school life—the orchestra.



Look out! Here we come! Make way for the Ag. 1. Brigade! Friends of the Technical College, lend us your ears and let's just whisper a few things about ourselves.

As Mr. Park has often mentioned in assembly, we are the junior agricultural experts of the School. Anyone can tell this who has heard the statement, by one of our number W— that "the broad-bean is a large seed for its size"—a statement worth broadcasting all over the School. One of our "budding" historians stated that Jullus Caesar passed through the Suez Canal by boat on his way to Egypt. Are we not the brainiest, brightest and most brilliant set of individuals in the whole College?

But wait—there are some fine footballers in our form, notably Coyle, Holmes and Flynn, who have played well against rival teams. And did we not succeed in resisting all the onslaughts of a second year form, B.T.2., at Rugby.

The School's Agricultural Exhibition is to be held in November, so we are all doing our very best in the way of growing vegetables and flowers to make it the most successful show yet held at our College.

#### THE EGG.

The egg is an object very largely in the public eye. From the kitchen to the theatre, from the palace to the henhouse it makes itself apparent and is, in each sphere, equally at home. The clucking hen eyes her triumph with no less a sense of inward serenity than that with which the housewife eyes her omelette.

Hard-shelled, soft-shelled, hard boiled, soft boiled or neither shelled nor boiled at all, the egg becomes the subject of much speculation and is, in itself, no less a mystery than the sphinx; and more enduring. Like roses, eggs "live within the sense they quicken."

The egg lends itself exceptionally well to advertisement; for example, what delight in contemplating a well-executed poster of "Samson's Succulent Sausages, garnished with 'hard boiled' eggs"; what thrills in "To-night at 8, Two-Gun Bill, the 'hard boiled' Egg, from over the Border." The sight of an egg spreading blanket-like across the features of an ill-liked politician can hardly fail to appeal, but who can resist a smoking platter of eggs and bacon.

Poached, boiled, scrambled, fried or thrown at the erring husband, the egg yet preserves a flavour and compactness entirely its own.



The Business Training forms have this year been well in the limelight, for various reasons, so we will not trouble to introduce ourselves. Suffice it to say that as the first year pupils in this section, we are doing our best to uphold the traditions of our earlier namesakes.

At the end of the first term we suffered a great loss, when J. McGregor left us for B.T.2. Not that we miss his person, but with him went a number of valuable old documents relating to the early doings of our form. These have been lost for ever, and alas, there is not one of all of our number who is sufficiently versed in the intricacies of our mother tongue to set down our doings in a fitting manner.

Still some points are so important that they cannot be omitted; during the second term we showed our prowess as footballers by decisively defeating our heavier rivals M.E1. by 8 to 3. Our form is exceptionally well represented in the school football teams—in fact on practice nights our Mathematics master is left with scarcely enough to make a class, and in both swimming and athletics we, at least, entered and did our best.

This probably accounts for the fact that at the beginning of the year we were rather a frisky lot, and even now we do not seem to be credited with exceptional ability, although at odd times we do work hard. After a bit of gentle (?) persuasion we seem to have settled down and as for our ability, time alone will tell.

We submit as a little contribution the following lines by an unnamed author.

We have been asked to write a verse  
Which will not feel the Censor's lead,  
We must respond in accents terse  
And be most careful what is said.

"Dear Sir, the task you set to us  
Is rather harder than you know—  
For things that will not cause a fuss  
Are very scarce, as we will show.  
Now English History would make  
The subject of a lovely rhyme.  
But Mr. C—han might take  
Offence, and view it as a crime.

Then what about our Algebra;  
What if we should refer to it?  
And say that graphs and such-like are  
No use to us—no! not a bit!

Great is the trouble we would face  
When next we met our Mr. B—e.  
No! This is not the time or place,  
To curse a Mathematics book.

That leaves us with no other choice,  
That is as far as we can see,  
To drop it all, and with one voice  
Speak of our friends, B.T.1B.

They don't like sports, but spend the day  
In taking further work instead,  
And when they throw their crusts away  
We take the blame before the Head.

But time and space are getting short,  
So we must stop and wish you well  
And settle down to being taught—  
It doesn't matter—there's the bell.

Having embarked on a business career, we are studying a wide range of subjects, many of which are so interesting that we are unable to tear ourselves away when the bell rings. Hence the proverb: "Book-keeping is the mother of detention." This has been indeed a year of enlightenment.

We have made friends with many household pets such as the "bean" and the "atom," while the playful antics of the "stocks and shares" or of "X," keep us highly amused. Both Mr. Leeves and Mr. Drake teach us to "balance" and in both cases we are liable to land "on the mat."

Barry, our conjurer has a very useful bag, the lock of which always becomes jammed when homework is required. Still, on the whole we are an upright band of youths as we have Parsons in our midst. We had also a Bishop, but he left.

Both in the athletic and swimming sports we were well represented, with an ample measure of success. We also have done our share in the football world; while a keen form match with E.1, resulted in a draw, 3 all.

### BUSINESS TRAINING 2

A brilliant form is B.T.2.  
Whose merits need no adding to,  
We need no urge to do our best,  
In field of sport or schoolroom test.

And it came to pass that certain second year boys were united together under the name of Business Training 2.

And they were gathered into the fold by a shepherd, their form-master, and there they were taught many things and they followed

the straight and narrow path for those that wandered by the wayside were chastised for their manifold sins.

And lo, it was found that these boys were all well versed in knowledge, yea, even unto being the brainiest of the school.

And it was found also that they were a class of athletics who carried all before them.

And other classes rent their garments and cast ashes on their heads, crying: "Why dost this class, B.T.2., win in all things and shame us before the multitudes?"

And all masters answered, saying: "This B.T.2. is the best class because they are the most diligent and most heedful to the voice of authority; verily, verily, we say unto you that if ye were as they this would be a model school.

And the other classes groaned, for they knew that this was true.

Wishing to prove our claim of being "cock of the walk" on the sports' field, B.T.2. offered a challenge to other classes to play at both codes of football. Matches were arranged with E.2., they being allowed to gather players from E.1. The Soccer match was abandoned owing to E.2.'s lack of players but in Rugger we upheld our reputation and proved victorious with a score of 6-0. Agriculture 1. challenged us and a strenuous tussle ended in a draw. We are hoping to do great things in the coming cricket season.

In conclusion we would mention that we have two representatives, Lund and Carr, in the 1st Cricket XI, Mitchell in the 1st Soccer XI, Carr in the 1st Rugby XV. and Lund captain of the 4th XV.

### BUSINESS TRAINING 3

#### Amazing Discovery

In a speech to the Society for Investigation of Infantile Phenomena, at the Society's Rooms this morning, Professor X referred to an amazing discovery made at the Technical College. Previous experiments had shown that intelligence was capable of lying dormant for years, and confirmation of the much-criticised data supplied by Herr Y had suddenly and unexpectedly come under his notice, remarked the Professor. One of the classes, Business Training III, which had been the despair of teachers, for many months, had now been proved to possess at least .003 per cent. above the average degree of intelligence. This amazing result was only arrived at, after many weeks of careful work and investigation. Unlike many scientific discoveries, this fact was capable of being demonstrated practically, by reference to the fact that several members of the group were now able to play games in teams of normal individuals, while some were even entrusted with a measure of control of the school politics. Furthermore he stated that as regards their work, this form showed an intelligence, surprising to those unacquainted with it. In conclusion, Professor X, stated that scholastic circles were puzzled by such an incredible phenomenon.

# METALWORK

19 31

## Form Notes.

### METALWORK I.

Our object in our joining the Metalwork Classes is to fit ourselves for some occupation of a mechanical nature. There are many branches of engineering in which we can occupy ourselves and no doubt each of us has thought out the particular line he wishes to pursue.

In the first year, we are instructed in the handling of tools and use of metals. We learn to make models, such as those found in most workshops. Steel brackets, a nut gauge, a double-ended spanner, spring calipers and a shifting spanner are among the articles we are taught to make. Some take several weeks to complete; they necessitate a great deal of boring, chiselling, filing and polishing. Of course, Metalwork instruction is not the only part of our school syllabus; English, history, mathematics, drawing and science are most essential, and, needless to say, we get plenty of them.

Like other forms in the school we are extremely keen on outside activities and the first year Metalwork Classes have every reason to be proud of their representatives in all branches of sport. We have Crowley M.1A. playing Rugby for the 1st XV., Beeston of M.1C. this year was captain of the 2nd XV. and was last year's junior athletic champion. In M.1B. Tetley was captain of the Sixth grade Rugby team. M.1D. had several members playing for the fourth and fifth grade Rugby and Intermediate Soccer teams. In the swimming sports this year, Andrews M.1A., gained third place in the Junior Championship while Archer M.1A., Watson M.1B., Holloway M.1D. gained places in different events. There are others who have taken part in the different school activities and all have done their share to bring credit on the first year Metalwork Classes.

### METALWORK II.

Last term's Massacre of the Innocents (?) has by now been well forgotten by the majority of the form, and we are beginning to return to favour in the eyes of our conscientious teachers. In our form we have several good athletes as well as quite a few wireless fiends together with a budding poet. One of our best boys has gone to the Navy—Britain will still rule the waves. About six of us were warned for Senior Free Places, but this term all have "knuckled down" to work, and expect to reap the reward of virtue.

After an oft repeated, "I'm expecting it any minute" and "It's coming on the Remuera," we have at last beheld the weird animal known as The Heat Treatment plant. We are hoping to have quite a fair amount of enjoyment out of it if it is installed before we leave school,

Metalwork 2B. is the snappiest, funniest and worst behaved form in the school. When in class we are a trial to all teachers. The only places where we really excel are in the workshop—and in the tuck shop.

Lately quite a number of minor civil wars have been developing in the class-room. Luckily for everyone concerned, the sharpshooters are very bad shots. They have the most up-to-date weapons; the guns consisting of lengths of elastic taken from golf balls and the ammunition of small pellets of pad paper. David certainly killed Goliath with a somewhat similar weapon; but in our case it is the aggressor who is most likely to meet his death—at the hands of our immortal enemy, the teacher.

Teacher discussing poets and poetry: "Does anyone know anything about Robert Burns?"

Voice from midst of class: "No, sir, I think he is away to-day!"

### METALWORK III. AND IV.

Quality has always been the mark of the aristocratic M3. and 4., though in previous years their numbers have been small. A roll of 16 or 17 had been the maximum at the beginning of the year, while in 1929 the form vanished about the middle of the third term. 1931 saw our numbers reach 40 with no diminution in our mechanical and intellectual prowess. Moreover, "old soldiers never die, they only fade away."

This must surely have been written about M4. as our roll call has slowly dwindled from 18 in the first term, to the lucky 13 at the time of writing. Our brethren do not leave, they simply fade away from the precincts of our classrooms and are seen no more.

Of those still here, Dallimore, Brown and Goddard are working hard for the studentship Exam. of the A.M.I.M.E. They may be seen (complete with ice-packs and cold water) on any Monday between 1.15 p.m. and 3.25 p.m. The remaining 10 are devoting all their spare time to thinking out methods of obtaining more spare time.

"Departed Brethren" are: Sutcliffe, a prosperous manufacturer of false teeth in the Pukekohe district. Thompson, electro-plating radiators and tin kettles in his father's business. I. de Willmoff, the leading light in an oil boring venture at Rotorua. When last seen, he was soaring skyward on a gusher. He always wanted to be an aviator. Davy at a brass finishing shop in Freeman's Bay. His present occupation consists of pushing a handcart across our fair city. I think that we may safely assume that he has already been sent out to buy leather oilcans, sky hooks, elbow grease and left-handed screwdrivers.

M3's casualties include: Stacey, in the limelight assisting Neon signs to diffuse a radiant glow over the city. Smith, engaged in the humbly important task of saving shoe-leather, i.e., in the manufacture of heel-and-toe plates.

#### Do You Believe it? We Don't!

"I will not set any homework to-day," said Mr. Scott.

Mr. Hollies: "Broken a gin. drill have you? Oh! Well, it does not matter."

"Wrestling is a brutal sport," said Brewer. "I don't like it."

"Don't pick up that paper, sonny, I'll do it," said Dallimore, the Head Prefect

Mr. Thompson: "Shakespeare absolutely bores me."

B.S.M. George: "Please yourselves, boys. Don't form fours if you don't feel like doing it."

**Personal Pars.**

Although it is gradually dwindling our class can still hold its head high. The chief attraction, our friend Tarzan (Stacey) has left, but we have found another one, a "T.T." (tireless tongue) which is owned by Short. Our three underworld representatives, Hodge, Tonkin, Brown are still thriving. At Rugby football we are well represented by a strong team, namely: Gray (4th Grade A.), Raper, Faithful, Oliver (4th Grade B.) and Magill (5th Grade and at the end of the season they were quite proficient at making mud pies. Our gymnastic specialists, Stevens, Brash, Morrison and Tonkin, are improving while Stevens also shines at missing trains. The two fish, Fraser and Mercer have not been caught yet while the dancing professor, Pickering is progressing well. The Maths. expert, Whaley has returned from a prolonged holiday and the literary specialists, Murray and Bramley are still working hard. The money investor, Early has lived up to his reputation by entering for the Studentship of the Mechanical Engineers. (Entrance fee 30/-) We all wish him luck.

**WOODWORK 2.B.**

Front Row (Sitting): Wright, Smith, Darvill, McFadzean, Rodger, Richards, McLeod, Vaughan, Watts.  
Back Row (Sitting): Carpenter, Lockhart, Stone.  
Standing: Rule, Wilson, Crawford, Marr, Swinton, Mr. Gemmell.

Hello! Hello! This is station W2, broadcasting from the Seddon Memorial Technical College, Wellesley Street East, Auckland.

We are a cheery lot of fellows as you can see from the photograph. The Bow String Roof Truss on which the five boys are supported, is a model exact in every detail to a scale of one-twelfth full size, having a span of one hundred and twenty feet and a height of twelve feet, original size.

**FIRST XV. 1931**

Third Row: Flynn, Baker, Skyrme, Stevenson, Robinson.  
Second Row: Davies, Holmes, McDermott, Brown, Crowley, Evans.  
First Row: Noonan, Manoah, Farquhar, Mr. Titheridge, Kay, McGregor, Wilson.

**SIXTH GRADE A RUGBY TEAM  
1931 CHAMPIONS.**

Front Row: Davies, Green, Marr, Richards, Bindon.  
Second Row: Jackson, Bowrey, Seagar, Wakefield, Dale.  
Back Row: Mr. Mc Killop, Adams, I. Smith, Mendelsohn, Beard, Flynn

The five boys weigh, 7 stone 10 lbs., 6 stone, 7 stone 5 lbs., 7 stone 5 lbs. and 7 stone 6lbs., respectively, considering the point-load to start at the left hand end. This produces a total load of 4cwt. 53 lbs. As seen in the photo, the deflection is practically nil; in fact it could carry a much greater load, but our little band in Woodwork 2 believe in "Safety First."

The calculations of the various stresses set up in the members of the roof and truss would prove a nightmare if imposed upon the boys attending the mechanics' classes. However, the Bow String Roof Truss is an excellent example of what any architect or builder may require to design or calculate its stresses. We all hope that in the future Applied Mechanics will enable us to do our own calculations. We have attempted to learn our mechanics in a practical way, studying the problems not from a mechanics book but on the actual job.

Apart from class room work, the form excels in many of the school activities, three members of the Life Saving Squad having earned their Bronze Medallions. The form's musical ability is prominent in the school orchestra. In the cadets we have three members of the Ambulance Section receiving instruction in First Aid. Our Tuesday afternoon sports are taken great advantage of, while our gymnasium periods are a joy to the whole form.

In the distance, we see a cloud rather dark, yet of a hue which spells in our minds the words, "Third Term Examination." Ah, that dreaded foe! Our little band is realising that a good, strong foundation is necessary, and all believe that our school life is helping us to form the basis of our future. Lo, keeping in our minds the true, simple motto—"Vitae, Non Scholae Discimus"—we hope to reap the rich reward in store for us.

This is station W.2., broadcasting from Seddon Memorial Technical College, Wellesley Street East, closing after a happy, successful year of work and play. It will not be broadcasting again, until the next third term issue of the "Seddonian."

### Woodwork 3 and 4

This year our class is much larger than in previous years and so we have been given a complete course, consisting mainly of Woodwork and Mechanics. These two subjects have been very interesting. In the workshop we have studied building construction, and as a result of inspecting several semi-built houses, we have been able to construct model garages complete in every detail. In Mechanics the study of the strength of timber and roof truss problems have occupied most of our time. We are waiting for the concrete testing machine to be set up.

We have a prefect and councillor in the combined form. It may be mentioned that of a total of thirteen, three are taking a Matriculation Course. Members of the form have contributed to the success of the 1st Soccer XI.—Dallimore (H.) and Collins; 1st Rugby XV.—Wilson; 2nd Rugby XV.—Lewis and Borich and McCook; H. Dallimore

## Evening School Notes

### THE PACKARD DIESEL ENGINE FOR AIRCRAFT PROPULSION

The main advantage of having Diesel power in machines of this type is: Economy of running costs; a plane powered by an engine of the make under review flew 1,200 miles non-stop at a total fuel cost of 35/6. Moreover, the fire risk is not so great, as the oil fuel must be heated before it will burn. All ignition gear is dispensed with, the fuel being sprayed into the cylinder when the air therein has been compressed to a pressure corresponding to 1,000 degrees Fahrenheit, which is well above the temperature required to ignite it.

The Packard engine closely resembles the radial benzine engine, the general design being similar. It has nine air cooled cylinders and works on the four stroke cycle, air being admitted to the cylinder by the same valve through which the burnt gases are exhausted. Cylinder bore is 4 13-16 inches and with a stroke of 6 inches the engine develops 225 Brake Horse Power at 1,900 revolutions per minute. The whole job, assembled in place, is 45 inches diameter over all and weighs 510 lbs. or 2.26 lbs per B.H.P.

The cylinders are cast separately and are attached to the mounting ring by clips, the ring in turn being fixed to the crankcase by 8,  $\frac{3}{4}$  inch bolts. The crankcase itself is a single casting of magnesium alloy with steel housings to carry the main ball bearings. The single valve in each cylinder for air intake and exhaust are actuated by a 4 lobed cam, driven at  $\frac{1}{4}$  of engine speed. A similar cam also on the after end of engine actuates the fuel pumps through push rods. A flat spiral recess is arranged in the aluminium alloy piston to ensure turbulence in combustion chamber. Connecting rods follow usual radial engine practice, i.e., a large master rod with the link rods working on to lobes around the crank-pin bearing. The crankshaft is in two parts, the pin, one web and the front drive shaft being one piece; while the back web is split at the top and clamps to the pin with a through bolt and feather.

Starting is effected by what is known as the inertia system, that is, a small electric motor drives through gearing to a fly-wheel. When this wheel has gained sufficient speed, a dog-clutch is let in, connecting it to the engine, the power stored in the wheel being sufficient to turn engine over to start. The throttle is held full open during cranking, and is slowly closed when firing commences.

Cycle of events are as follows:—On the first downward stroke of the piston, pure air is drawn in through the valve in the cylinder head. At the bottom of stroke, valve closes and the air is compressed as the piston rises. The compression reaches its maximum at 16 times induction air pressure. At this point the fuel is injected by the fuel pump which is located right against the cylinder head. The charge burns, expands and forces the piston down, this being the only working stroke of the four. When the piston has reached the bottom of stroke and begins to return, the valve opens and the burnt gases are exhausted, this completing the cycle.

This type of engine has been well tested and seems to be giving good results in several different classes of commercial aircraft that have been fitted as trial jobs. One drawback which might possibly handicap it would be the high cost of overhaul as on account of the high compression pressures carried, clearances would be very fine. Fuel pumps may also be a source of trouble—the correct amount and atomisation of fuel being dependant upon this part being in first class order.

—R. King, Marine Engineering Class.

### THE MANUFACTURE OF SOLID FORGED BOILER DRUM

It was in 1926 that the late Sir Charles A. Parsons demonstrated to the marine world the extraordinary potentialities of high pressure, high temperature steam propulsion. This system was incorporated in the turbine steamer "King George V." and represented a very important advance in marine technique.

With the introduction of the high pressure system came the necessity of proportionately stronger boiler drums. To meet this necessity, two British firms developed the manufacture of solid forged drums, a hitherto unknown undertaking in the engineering world. The most important feature in the manufacture of these solid forged drums is the absolute necessity for symmetry. Primarily this depends on the furnacemen who must supply the forgemen with a forging of uniform temperature within narrow limits throughout its mass. The forgemen must now manipulate the forging under the press in such a manner that an equal amount of work is done all round, progressing gradually along the whole length of the drum.

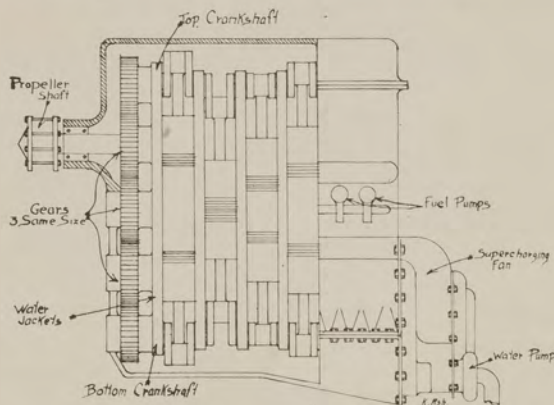
The difficulties of manufacture may be realised when it is stated that ingots up to 175 tons each are handled. An ingot of this size would eventually make a finished forging of about 115 tons. These forgings have to be manoeuvred into the furnaces by one crane, so that at one lift the crane has suspended over 200 tons, as the forging mandrel and balancing tackle would turn the scales at about 100 tons. The forging may be up to 60 feet long so that the machining processes also necessitate some awkward manoeuvring.

Providing the forging is straight and true the machining process is simplified considerably. The forging is set up in a lathe and two rings are parted off one end. These rings are subjected to the same heat treatment as the main forging and then scientifically tested. Providing the tests are successful the machining is continued. This process consists of boring the inside and turning the outside throughout its length, and cutting the manhole. For the latter a machine has been designed to cut oval holes by a combination of vertical reciprocating motion and plain rotation.

The forging is again heated and the ends closed in, after which the drum receives the requisite heat treatment, and the drum is completed.

### THE JUNKER'S DIESEL AIRCRAFT ENGINE

A new departure in aircraft practice is the introduction of Diesel engines as propelling motors. They have been used for some time in lighter than air craft, but are now being developed by several firms, those which have so far been demonstrated being the Stearns and Packard engines in America, and the Junkers in Germany.



The Junkers engine is built on the same system as their marine job, employing the two stroke cycle with blast injection. Two opposed pistons in each cylinder, are connected to separate crankshafts at top and bottom of engine. A train of spur gears on the front end connect the crankshafts to the propeller, the size of gears being arranged that with an engine speed of 1,500 revolutions per minute, the propeller turns at 1,100 revolutions per minute.

The six cylinders are of a light alloy of aluminium cast in one block, the water jackets and half the crankcase being incorporated. The total weight of an engine is 2.6 lbs per Brake Horse Power.

A supercharging fan is located above the circulating pump on the rear end of the engine to supply air at the scavenging ports at a pressure of 17 lbs. per square inch. Each cylinder has four injection nozzles set at an angle of 45 degrees, so that the oil spray enters with a swirling motion. Fuel is supplied to the nozzles from two pumps, one on each side of the cylinder and actuated through rocker arms by camshafts running at mid height of engine. Consumption is stated to be .365lb. per brake horse power per hour.

The 720 B.H.P. motor, known as the "Jumo 4," was shown for the first time in April, when a nine seater aeroplane so powered, flew over Berlin. The only noticeable difference from petrol engined machine in flight was a thin streak of bluish smoke from the exhaust pipes.

R. King.

### HEAT TREATMENT OF STEEL

#### Wild-Barfield Electric Furnace

The Engineering workshops of the College have been considerably improved by the addition of a Wild-Barfield Electric Furnace to the equipment. This is a modern furnace, and so far as we know is the first of its kind installed in New Zealand, although there are plenty to be found in Countries more advanced industrially. It is hoped that from the use of this up-to-date plant for hardening the products made in the Engineering workshops, students will derive great benefit.

Steel to be correctly hardened must be heated to exactly the right temperature in order that it will have the finest grain size; and the arrangement of the molecules is altered by the application of heat, and fixed permanently by quenching in oil or water. The greatest difficulty which the Engineer has to contend with is to get exactly the right temperature. Over-heating results in coarsening of the grains; this causes reduction in the strength of the steel, and loss of durability. Under-heating results in the development of soft spots and irregularity in the structure, resulting in unsatisfactory results when applied to work.

The Wild-Barfield plant includes a furnace consisting of a special heat treatment chamber or oven surrounded by closely wound coils of alloy wire. The heat is produced by the electrical resistance of the coils of wire, and the furnace is so arranged that the current may be varied at will by a controlling resistance which varies the temperature of the furnace to suit the conditions.

Super-imposed on the heating coil is a secondary winding which is electrically connected to the Magnetic Indicator on the control panel. When the steel to be hardened is put into the furnace, the electro-motive force in this secondary winding is increased through the action of a coil called the Compensator. The effect of this is to cause the pointer of the Magnetic Indicator to move over against a stop, where it remains and vibrates, giving rise to a musical note while the steel is in the magnetic condition. When the steel has nearly lost the magnetic conduction due to the increase in heat, and is, therefore at the correct point for quenching, the pointer leaves the stop and moves slowly back down the scale. The pointer stops when the steel has lost its last trace of magnetism, which is the correct point for quenching, and which must then be carried out immediately.

The operation of tempering steel is thus very much simplified. The only thing to watch is the Magnetic Indicator—which is similar to a Volt-meter, and as soon as it is noticed that the steel is beginning to lose its magnetism, the needle Indicator must be watched carefully until it stops, then the quenching is done at once. The operator knows definitely that the steel is neither over nor under-heated, but that its molecular condition is the correct one in order that the best results may be produced.

This new method of tempering steels removes all elements of uncertainty, and it enables Engineers to substitute the results of definite scientific research for guess work, upon which most other systems are based. As the proper tempering of all the products produced in an Engineering workshop is of the utmost importance, if correct and careful work done in the production part of the process is to be rewarded, it will be seen that scientific methods are essential.

## PULVERISED COAL

The burning of coal in pulverised form has attracted a good deal of attention during recent years, and a number of plants have been installed for producing it, both in America and in the United Kingdom. There are now several types of plants on the market, but these differ only in regard to detail, the main principle common to all being the introduction into a furnace of a continuous stream of finely powdered coal which when ignited, maintains a gas-like flame.

The chief advantages claimed for such an arrangement are:—

1. The amount of excess air required for combustion can be reduced to a lower figure and a higher average efficiency can therefore be obtained.
2. The amount of heat delivered to a furnace can be so easily and quickly adjusted that a steam boiler fired by pulverised fuel has great flexibility and a heavy overload capacity.
3. Fuels such as low volatile slacks and others, containing a very high percentage of ash, which are difficult to burn satisfactorily by other means, can be readily consumed in a pulverised form.

There are two main systems of pulverised coal burning:—

1. The Central System.
2. The Unit System.

1. In the Central System all the coal for a complete installation is dried and pulverised by a central plant and conveyed to the individual boilers through overhead bunker pipe lines and feeders.

2. In the Unit System each boiler is fitted with its own pulverising mill, and the fuel is delivered direct from this to the furnace.

It is rarely possible to equip existing boiler plants for pulverised fuel firing without material modification to the furnace, and for the best results to be obtained, the steam-raising plant should be specially arranged for the purpose.

The two processes of primary importance in connection with pulverised coal burning are those of (1) Drying; (2) Pulverising.

1. Driers take two main forms, rotary and stationary. The former may consist of a steel cylinder, probably 50 feet long and 6 feet in diameter, carried in a cradle and slightly inclined to the horizontal. It is slowly revolved by means of a pinion gear, and the coal to be dried gravitates from the higher to the lower end. Either separately fired or waste furnace gases are passed both through and round the revolving drier, and by this means a higher percentage of moisture is extracted from the fuel.

.... Pulverisers.—After drying, the fuel is passed into the pulverising mills. These are of several types, but in all cases it is necessary to reduce the ground fuel to a high degree of fineness and for efficient working it is considered that not less than 68-70 per cent of the bulk should pass through a 200 mesh sieve (i.e., 40,000 holes to the square inch.) while the remainder should pass a 50 mesh.

Of the mills the ball mill as used in the Fuller system is typical. In the ball mill four heavy unattached iron balls are caused by rotating arms to travel round a wheel race to which the fuel is continually fed. As the coal is ground and crushed to a suitable fineness, it is carried by air currents to a separating chamber and ultimately to the storage bins.

The fuel may be carried long distances by means of a Fuller-Kinyon Pump, in which a small amount of compressed air is allowed to mix with and agitate the powdered fuel so that it assumes a semi-fluid condition.

It is stored in bins above the boilers and falls as required down enclosed chutes or pipes into mechanically operated feeders. The fuel is carried forward until it meets a supply of air, by the aid of which it is projected through the burners into the furnace.

—(Marine Engineering Class.)

## CHROMIUM PLATING

Chromium is a tin-white metal, considerably harder than hardened steel, indeed it cuts glass with ease, and its hardness closely approaches that of the diamond.

The plating is sometimes deposited over a nickel coating, the silvery white appearance when removed from the bath, taking a finish of high degree, under the polishing buff.

This polish is impervious to sea water, alkaline solutions, or acid salts, but Chromium itself is attacked by Hydrochloric acid. This acid does not touch steel, and in this connection an interesting application of these facts is possible. Chromium when deposited on hardened steel, leaves a thin covering, which the file will not mark.

Precision gauges coated with Chromium to a depth of .002 inch, give much greater service than any other type, and when the gauge is worn, the chromium remaining may be removed by Hydrochloric acid, and the gauge re-sized by a new coating.

Chromium plated gear cutters are said to have from three to five times the life of ordinary cutters, and chromium plating for the wearing parts of motor-car engines, as pump shaft spindles, gudgeon pins, etc., is being used successfully. The chromium plating of parts such as radiators, door handles, etc., is well-known, the advantage here being the elimination of the constant cleaning necessary with nickel plating, and the longer life of the protective deposit. The cost is from three to five times that of nickel plating, largely due to the high current densities necessary. These generally, for hard deposits, are about ten times those required for nickel plating. Chromium plating thus has two purposes, the one decorative, the other for the prolongation of the life of mechanical parts.

The latter development is most interesting, and will be watched keenly by all engaged in promoting efficiency in every branch of mechanical activity.

## BUILDING CONSTRUCTION AND EARTHQUAKES

In view of recent happenings in Hawke's Bay and other parts of the country, students of Building Construction are particularly interested in the development of new regulations, having as their object the rendering of buildings more resistant to earthquakes. Much investigation has been carried out in this and other countries, particularly in America, Japan and Italy, these places having suffered severely from earthquakes in the past, and as a result of these investigations, new by-laws governing the erection of buildings in New Zealand will no doubt soon be brought into force. It does not come within our province to discuss the cause of earth disturbances, this we must leave to scientists and other authorities, but it would appear that the opportunities of observing the earth movements of a "shake" are so few and the actions set up so varied and complex, that definite conclusions are difficult to arrive at. Our text books give us information concerning stresses set up by other known forces, such as wind pressure, and different conditions of loading, soil pressure, etc. Those may all be accurately calculated and designed for with an ample margin of safety, but the subject of resistance to earth movement does not appear to have received the consideration which it deserves, although there is no apparent reason why we should not build to overcome largely the stresses set up by this action. It is perhaps not possible to design a building absolutely proof against damage by a shock of such intensity as that recently experienced at Hawke's Bay, but certainly much may be done to make buildings safer and less liable to fall under shock. Here again we do not wish to discuss the respective merits or demerits of the different types of construction, particularly in view of the fact that it has been stated that buildings of various types have withstood shocks equally well.

The point that we are more concerned with is the fact that many buildings did fail with consequent loss of life and property.

This brings us to a point that all connected with Building Construction should seriously consider, and that is that faithful workmanship has much to do with the resistance of a building to earthquakes. It has unfortunately to be admitted that in many instances, buildings have been erected ill adapted to resist earthquake shock, not always perhaps through consideration of initial cost or overmuch economy, but possibly lack of consideration of what is required in sound construction. It is generally known and admitted that the adhesion of mortar, the proper bonding and tying of materials at all intersections, from foundation to roof, has much to do with the resistance of a building to earthquake shock. A building efficiently tied together thus becomes a single unit, all parts acting together, preventing any section from becoming detached and developing a vibration or swing independently of the structure as a whole. This is the action set up which is so damaging to chimneys in wooden buildings, as evidenced by the fact of failure taking place at the point where the chimney passes through the roof. Many problems are presented which are in need of solving, the prevention of fire after an earthquake being one of the greatest, although by making our buildings more resistant to shock, this automatically reduces the risk of fire. Other problems are the protection of the essential public services, such as drainage, water and electric supply, etc. The outcome of the investigations and research must be an improved standard of building, requiring more technical skill to achieve it, Faithful craftsmanship, together with a full knowledge of the underlying principles of his trade must be more and more the qualifications of the tradesman and builder of the future.

## Some Pioneers of Engineering

The world to-day has some great problems of industry, such as unemployment which it would be very glad to have solutions for. There have been remarkable falls in the price of almost every article of food, clothing or housing, and it would seem that there has been produced far more food, clothing, etc., than the world can sell. Yet millions are having too little food and clothing. There is something out of adjustment; something wrong in our system of producing the goods the people of the world consume.

It may help us to understand the vast changes in methods of production made in the last 100 years, if we ponder over the inventions made in the list below. It is difficult to realise that machinery of almost every kind in use to-day, was unknown when Captain Cook came to New Zealand: that industry then was totally different and that most of our troubles of to-day were unknown then. "Merrie England" is the name that has been given to the England of that time: a country in which each house produced almost all it consumed.

Producer and consumer were then the same. Unemployment was hardly known. Wants were simple. Things happening at the other end of the world made little difference to the simple folk of "Merrie England."

The century and a half through which we have passed, has been simply one long rush of new things that have changed the lives of civilised peoples. Our world of 1931 is almost a totally different one from that of 1800. If we have grave troubles, don't let yourself think the whole system should be upset. Let us rather remove the troubles, than scrap the whole machine. Knowledge is wanted now more than ever, if we are by the year 2000, to have so regulated our producing and consuming system that we shall again be able to call the Motherland "Merrie England," and knowledge is slowly making us fit to solve the problems, but as all nations must act together and nations are jealous of one another, it will take time to get our "new world" into good working order.

A short list of famous inventors will help you to realise what a different world we have to-day because of their work.

- Robert Hooke,** Robert Hooke, founder of Practical Mechanics, was born at Isle of Wight in 1635. One important branch of Hooke's work consisted in his development of the microscope. He also showed the connection which exists between the height of the barometer and the state of the weather. He died in 1702 at the age of 86.
- Dr. Denis Papin.** Dr. Denis Papin, a French physician, born at Blois about the middle of the seventeenth century, developed the science of the steam engine. They were the Piston and the Safety Valve. Papin's Digester is a piece of laboratory apparatus, well-known at the present day. He conceived the idea of exploding gunpowder in an enclosed cylinder, forcing a piece of plate up the cylinder. He died in the year 1714.
- Thomas Newcomen.** Thomas Newcomen, born in the latter part of the seventeenth century, came of an old Devonshire family. He was an ironmonger and a blacksmith by trade, and the originator of the first practical steam engine called Newcomen's Atmospheric Engine.

James Watt, born at Greenock, Scotland in 1736, spent his entire life in devising practical types of steam engines fit for everyday use. Watt was quick to perceive the defects of Newcomen's engine condensation of steam in the cylinder, and after a little experiment, he produced his single acting engine, and subsequently brought out his double acting engine. Watt died in 1819.

Richard Trevithick, a Cornish mining engineer, born in 1771, in the Parish of Illogan, Cornwall, may be well considered to be the pioneer of the Locomotive. Probably Trevithick's most spectacular locomotive was his "Catch me who Can," which was exhibited in London in 1808.

George Stephenson, born in 1781, creator of our modern railways. In 1825 Stephenson constructed the first railway, which ran from Stockton to Darlington, the speed of the locomotive being equal to that of a horse conveyance. The famous Manchester-Liverpool Railway engineered by Stephenson, was completed in 1829, and on this he employed the "Rocket," the average speed attained being 15 m.p.h. He died in 1848.

Jonathan Hulls, born about the year 1699, in the village of Campden, was one of the earliest pioneers of the steamship. He experimented with his model boats on the River Avon near Evesham, and a trial took place in the year 1737. The trial was a complete failure, and Hulls came in for a torrent of ridicule.

The first partially successful steamship was the "Charlotte Dundas," constructed by Symington in the year 1801.

Henry Bell, a native of Linlithgowshire, in the year 1812, constructed a steamship 40 feet long, propelled by paddles driven by a single cylinder engine, called the "Comet." It was the first Clyde steamship, the first of a long line of steam propelled vessels which have made the Clydeside world-famous as the home of steamship building. Bell died in 1830.

Sir Richard Arkwright, born in Preston, Lancashire, in 1732, was probably the greatest pioneer of the textile industry. His invention of the "Spinning Jenny," so facilitated the production of yarn that the industry was immediately placed on a large scale manufacturing basis. He received a knighthood at the hands of George III. His career came to a close in the year 1792.

Samuel Crompton, equally as brilliant as Arkwright, was born at Belton in the year 1753. He invented the "Mule," which was universally adopted in the cotton industry, and at a later date, Parliament voted the inventor the sum of £5,000 for the yearly addition of £350,000 to the country's revenue. He died in 1827, comparatively a poor man.

Benjamin Huntsman, the inventor of cast steel, was born in Lincolnshire in 1704, is very little honoured at the present day, and yet by his one great discovery of a method for producing hard and consistently reliable steels, conferred an enormous benefit upon the engineering industry. He died in the year 1776.

James Prescott-Joule, born at Salford, near Manchester in 1813, gave to the engineering and to the scientific world in general, two comprehensive

James Watt,  
1736-1819.

Richard  
Trevithick,  
1771-1833.

George Step-  
henson,  
1781-1848.

Jonathan Hulls

Henry Bell,  
1767-1830.

Sir Richard  
Arkwright,  
1731-1792.

Samuel  
Crompton,  
1753-1827.

Benjamin  
Huntsman,  
1704-1776.

James Prescott  
Joule,  
1813-1889.

principles which science includes among its category of "laws" that is (1) The Laws of the Conservation of Energy. (2) Mechanical Equivalent of Heat. Joule was not only a pioneer of engineering; he was a pioneer of chemistry, electricity, physics and mechanics. He died in the year 1889.

William Thompson (afterwards Lord Kelvin), born in Ulster in 1824, was both an engineering and electrical engineer. Kelvin was educated at Cambridge. He received his degree from that university, and at the early age of twenty-two, he was appointed to the chair of Natural Philosophy at Glasgow University. Kelvin's researches and assistance in the Atlantic telegraph scheme resulted in the successful completion of the cable in 1866. Lord Kelvin died in 1907. He was buried in Westminster Abbey.

Joseph Whitworth, apostle of engineering accuracy, was born at Stockport near Manchester on the 21st December, 1803. Whitworth realised the vital importance of setting up accurate standards of measurement. In 1841, Whitworth urged the adoption of a comprehensive and uniform system of screw threads. He also showed that if any two of three surfaces fit together perfectly all the three surfaces must be true planes (Whitworth Surface Plates). He also invented a machine for making very minute measurements of length; with some of the present day Whitworth measuring machines it is possible to effect practical measurements of an order of 1-100,000 inch. He died in 1887, and in his will he left the sum of £100,000 for the permanent endowment of Whitworth Scholarships.

The first practical steam turbine was constructed by Dr. Gustav de Laval about the year 1889. Parson's built the first set of turbines for The Turbina in 1897. The Hon. C. A. Parsons was born in London on the 13th June, 1854. He was educated at Oxford, and in 1899 Parsons built his own works at Heaton, Newcastle-on-Tyne. The firm of C. A. Parsons is responsible for the construction of various types of stationary turbine engines, dynamos, transformers, searchlight equipment and other electrical apparatus. He died in 1931.

Otto was born in 1833, and experimented with the gas engine in 1854. In 1867 he achieved success in conjunction with his partner Langen. In 1876, Otto was successful with an improved type of engine, and ten years later, there were over 30,000 of these engines in use. In 1881, however, Dugald Clerk, invented the two stroke engine, and in the following year, Herr Daimler brought out the first practical internal combustion engine designed to run on liquid fuels, and so came the motor-cars (carburettor). Otto died at Cologne on 26th January, 1891.

Rudolf Diesel was born in Paris of German parents in 1857. The first experimental Diesel Engine was constructed in 1893. It utilised coal dust as fuel. Diesel rapidly improved upon this early attempt, and within a number of years, the engines began to be turned out in large numbers, utilising oil fuel as fuel. Diesel Engines are of the two and four-stroke type. Dr. Diesel met a tragic end, drowned at sea between Antwerp-Harwich, on the night of the 30th September, 1913.

Lord Kelvin,  
1824-1907.

Sir Joseph  
Whitworth,  
1803-1887.

Sir Charles A.  
Parsons,  
1854-1931.

Nicholas Otto,  
1833-1891.

Dr. Rudolf  
Diesel,  
1857-1913.

### MOTOR TESTING PLANT

Equipment to thoroughly investigate the efficiency of a motor-car is being installed in the Motor Workshop and will shortly be ready for use.

A Flowmeter for measuring the consumption of petrol has been obtained from England, and a suitable anchoring device, to hold cars firmly while being tested, is at present being made.

We will then be able to test the efficiency of the engine and the transmission, and to set the carburettor to definitely deliver the fuel at the point for maximum Horse Power, combined with efficiency in petrol consumption.

In these days, when every effort is being made to reduce costs in all directions, the advantage of working to determined results, instead of trusting to rule of thumb methods, will be evident.

In this direction the plant will be of great use.

The apparatus consists of two separate units:—

#### THE DYNAMOMETER

This is constructed with two wood faced pulleys of large diameter, keyed to a shaft. The rear wheels of the car can rest upon these pulleys and drive them by friction. That is, the car stands still, and the road moves, for, in reality, that is what takes place.

A water-cooled brake wheel is keyed to the shaft, and any suitable load may be applied to the engine of the car in this way. This means, that the engine is not "running light," but is under load, just as it would be under normal conditions.

#### THE FLOWMETER

This device indicates the actual consumption of petrol at different loads and speeds, when the engine is being tested as above.

These instruments were introduced during the war, and largely used by H.M. Government for testing aircraft engines, before these were officially accepted for service. They are particularly valuable in connection with "tuning up," and have been installed in the Test Shops of many motor manufacturers. The type installed in our shop is specially constructed for motor-car work, and readings are taken directly from a graduated scale, showing the quantity of petrol passing in units.

The value of the installation as a whole is obvious. The test will show the actual Horse Power delivered at the road wheels, losses in the gearing can be checked, and engine performance, both before and after an overhaul, noted. The carburettor setting can be quite definite, and the owner advised as to the most economical running speed. When the installation is functioning it should be kept constantly in use.

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Singer: "And for Bonnie Annie Laurie I'd Lay Me Down and Die."  
Listener (rising): "Is Miss Laurie in the audience?"

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While the radio occupies the corner once taken up by the cradle in a great many homes, the results are about the same, so far as keeping the family awake are concerned.

### DIESEL ENGINES FOR MOTOR CAR

Last year, a new type of engine, the "Doble" steam vehicle was exhibited in Auckland at the Winter Show. It is understood that one of the buses belonging to the Transport Board has been fitted with an engine of this type, manufactured at Price's Foundry, Thames.

In the field of Internal Combustion Engineering there is no doubt that Diesel engines are being so simplified that their use in Motor Engineering is almost a foregone conclusion. One usually associates with the term "Diesel," engines of great power and weight, such as those used in ocean liners, and as power plants for the scows that are so numerous in Auckland. It is not often that they are thought of as useful for automobiles, except for the heaviest of trucks. Leading journals, however, so often discuss this problem, that it is interesting to read that Diesel engine charabancs have been put on the road.

Reliability is a factor of first importance in motor transport whether on the road or in the air; naturally, the consistently reliable vehicle can hold its own in competition with vehicles of other types. It is said of the Diesel that it will pull its maximum load immediately on starting, up from cold. In some engines time must be given to the motor to warm up; a temporarily enriched mixture has to be used and the motor run light until it develops its maximum power. The Diesel engine is different from this in that it is able to take its maximum load immediately on starting up; consequently, it will use less fuel than motors which have to be warmed up.

In the second place, Diesel engines are very easily controlled and respond instantaneously to the slightest injection variation. When the engine is doing no work or idling, it uses practically no fuel; as the work demanded increases, so increased fuel is used. Few cars do not use almost as much fuel when idling as when travelling on smooth level roads at 20 m.p.h. The Diesel engine is, therefore, a particularly economical type, and this together with its great pulling power—even at low revolutions—makes it especially suitable for hill climbing, as much less gear changing is necessary.

One of the defects hitherto attributed to Diesel engines is that they are not so easily started as gasoline engines. In the newer types they start in the same manner as a gasoline engine through the use of an electric motor. In some of them, special Bosch incandescent heaters are fitted in the pre-combustion chamber, and these are allowed to glow for a short time in order that the chamber may be slightly heated. These heaters are fed from the battery and are, of course, unnecessary as soon as the engine takes up the running. Fuel consumption is the factor of greatest importance in making Diesel engines popular, for it usually has a lower consumption than that of a similarly powered petrol engine. Moreover, the fuel used is of a type which costs about one-fourth of the price per gallon used for benzine motors. Further, ignition is greatly simplified, there being no high tension wiring and no spark plugs.

There are both two stroke and four stroke types of Diesel engines. In the four stroke type being considered, the air charge is compressed as usual, the atomised fuel is not injected into the cylinder proper, but into a pre-combustion chamber adjoining the cylinder. It undergoes partial combustion, increases in pressure, and this extra pressure generated in the pre-combustion chamber, drives the fuel-air mixture through a special atomiser into the combustion chamber, where it is intimately mixed with air. The pre-combustion chamber with the special atomiser, replaces the compressor, and it is this device which has made the engine suitable for automotive use.

The engine is a reasonably cool one as the heat is absorbed and saved where it is wanted in the pre-combustion chamber, so we find the conventional radiator and fan fitted in front of the engine. The amount of fuel and the time at which it is injected can easily be regulated from the driver's seat, so control is both simple and complete.

A great deal of attention is being given to the development of the Diesel type of engine for use in transport, and much benefit will be derived from its use.

### MINIATURE GOLF

Here is a new game for your intelligence. Like miniature golf, it came from the United States. A referee is necessary and "Dick Shunary" (Webster's) was appointed. The game consists of finding words with fewest letters having the same meaning as those listed.

E.g. ostentation equals air; main equals c or sea; category equals set; imagination equals i or eye; junction equals t or tee.

Counting each letter in your synonym as a golf stroke, see how many strokes you require for the following round. In case of dispute use your dictionary. Par represents a good score (bogey): See if you can do better. If you can beat bogey, send your score to the Editor.

| HOLE | WORD        | PAR | SYNONYM | STROKES |
|------|-------------|-----|---------|---------|
| 1    | FESTIVE     | 3   |         |         |
| 2    | REMARKABLE  | 4   |         |         |
| 3    | RANDOM      | 5   |         |         |
| 4    | DISTANT     | 3   |         |         |
| 5    | ENTERTAIN   | 4   |         |         |
| 6    | REFLECT     | 5   |         |         |
| 7    | GRACEFUL    | 4   |         |         |
| 8    | EXASPERATE  | 3   |         |         |
| 9    | PREPOSSSESS | 4   |         |         |
| 10   | ESCORT      | 3   |         |         |
| 11   | HINDRANCE   | 4   |         |         |
| 12   | LITERAL     | 5   |         |         |
| 13   | TERMINATE   | 3   |         |         |
| 14   | POLL        | 4   |         |         |
| 15   | PLACID      | 4   |         |         |
| 16   | ACQUAINT    | 4   |         |         |
| 17   | HOWEVER     | 3   |         |         |
| 18   | IMMUNITY    | 5   |         |         |

### THIS IS FOR WOODWORK BOYS ONLY.

Esau Wood saw a saw saw wood as no other wood-saw Wood saw would saw wood. Indeed, of all the wood-saws Wood ever saw wood, Wood never saw a wood-saw that would saw wood as the wood-saw Wood saw saw wood would saw wood, and I never saw a wood-saw that would saw as the wood-saw Wood saw would saw, until I saw Esau Wood saw wood with the wood-saw Wood saw saw wood.

A girl's definition of a bolt and nut:—

"A bolt is a thing like a stick or hard metal, such as iron, with a square bunch on one end and a lot of scratching around the other end. A nut is similar to the bolt, only just the opposite, being a hole in a chunk of iron sawed off short, with wrinkles around the inside of the hole."

## Past Students' Section

The following clubs are affiliated with the Past Students' Association of which the President is Mr. E. James of the College staff, and the Secretary, Miss M. Stonex, c/o Fraser and Co., Chancery Chambers.

Football Club: Mr. R. F. Galbraith, P.O. Box 1549.

Ladies Hockey and Cricket Clubs: Miss E. Jeffrey, Colonial Mercantile Association, Ltd., Power Board Buildings, Queen Street.

Basketball Club: Miss M. Stonex, c/o Fraser and Co., Chancery Chambers, Auckland.

Tennis Club: Mr. J. McKain, Native Department, Auckland.

### THE PAST STUDENTS' ASSOCIATION

The various clubs affiliated with the association have been its main strength and centre of life, during the past year, and this is as it should be. This was the aim of the association, and now that the sturdy youngsters have found their legs, the parent body can recede more and more into the background. It still has a very important duty to perform and intends to carry on the good work it has initiated.

During the year a very enjoyable Annual Ball was held in the Assembly Hall, and it proved a great social success. The Hall was decorated with daffodils and greenery in the College colours, green and gold, and ferns added to the general arrangements, produced a very pretty scene. The night was fine and quite a gathering assembled to dance to the excellent music supplied by Eady's band.

An excellent supper was provided in Room 20, which was converted into a tastefully arranged supper room.

This is the first of what we confidently anticipate will be increasingly popular and successful Annual Reunion Balls.

A meeting of Past Students and Instructors who were connected with the College in and before 1915 was held in July, and it was marked with such enthusiasm that it was decided to make it an annual function. This shows that those older Past Students still have an eye on the College and its doings and it is an example to the younger boys and girls now passing through its portals. More will be heard of it at a later date.

By the time this issue is published another competition will have been held for the Past Students prizes in speech-making and in essay-writing. Last year much interest was created by our effort to encourage these arts, and this year is sure to see increased competition and improvement in style. It is as interesting and as pleasurable to Past Students as it is to present ones.

The final function for the year will be the Annual Picnic to be held on 29th January, 1932. A hearty invitation is extended to all to be present on that day.

The Past Students' Association looks to the boys and girls who leave the College to join up, and may this serve as a reminder to you to do so straight away, and also to remind any of your mates who have not done so. The annual subscription is 1/- and you are urged to obtain a membership card and fill it in right away. These may be had from the College Office or from Mr. E. James. Miss Vickery will be pleased to supply any information to the girls.

### SEDDON TECHNICAL COLLEGE OLD BOYS RUGBY FOOTBALL CLUB

It is now nearing the end of the season and it is possible to give some idea of the Club's achievements for the year, and to state definitely that a most enjoyable and successful season is drawing to a close, with the Old Boys' Club more than ever on the map.

Eight teams, requiring approximately 150 players were fielded during the year and they have worthily upheld the traditions of the School, Club and the game.

The more important phases of the Season's activities are here enumerated.

**Senior Team.**—Fourth position Gallagher Shield Competition, five wins, two draws, five losses; Points for 90, against 103. Was disappointing to its admirers in this competition, yet was never badly beaten, the greatest loss suffered being against Grammar 11—3.

Won Pollard Cup and Faulkner Medals. Six wins. Redeemed its reputation here for bright football.

The following players won Representative Honours, Reg Haslam, Dan Keane, John Nelson, Haslam playing a particularly brilliant game against Wellington.

**Second Grade.**—Won their section, suffering only one defeat. Owing to casualties and sickness were unable to field their best team in the finals but acquitted themselves very well. Points for 191, against 60.

Bob Brebner, Rod MacKenzie and Allan Blow obtained Representative Honours during the year and will be strong candidates for Senior Grade next year. The team visited Pukekohe on 3rd June, were successful in their match against the Old Boys there and had a very enjoyable time at their Reunion Dance. Pukekohe played a return match later in Auckland, gaining the major points, and were entertained at a team dinner and at the club dance in the evening.

**Third Grade.**—This team has met with only a fair measure of success but should finish mid-way in their section. It is to be commended for the way it has pulled together; has suffered no bad defeats, leading teams only gaining the decisions by margins of 3 and 5 points.

**Third Intermediate.**—A good team which had bad luck in the early stages; in the second round beat all leading teams, finishing in fourth place. Representative honours were attained by Davey, Brebner, Kennerley and McAdam. The latter has been playing a very consistent game and was called upon to play in the three finals of the Second Grade. Played Hamilton Technical Old Boys on the 19th inst., winning 9—0.

**Fourth Colts.**—Winners of their section, winning 16 games, losing one game only by 3 points. Points for 331, against 48. A set of players who will go far. Present boys will be glad to hear that boys who have recently left the school, Aro, Morey, Elliott, Thompson, Byerley and McKenzie to mention a few, have all been doing well, and that the newest recruits from the School Fifteen, Stevenson and Evans are showing exceptional promise.

**Fourth Grade A.**—A team which has not quite reached expectations, but which showed great team spirit, finally finishing in fourth place. Some boys have shown great promise, and Boulton, half-back, took his place behind the senior pack on one occasion while McRae, five-eighths, played in the two finals of the Second Grade. Played Pukekohe Technical Old Boys on the 12th inst. and Hamilton Technical on the 19th inst.

**Fifth Grade.**—Winners of the Fifth Grade Championship; comprised almost solely of boys who have recently left the School. Played 16 games, won 15, drew one; points for 154, against 14. A team that has played good football from the outset; one cannot individualise and yet one cannot overlook the good work of Murdock, Patterson, Darrow, Muir and Wilson, in bringing about this happy result.



### SENIOR A BASKETBALL TEAM

Front Row: G. Gosling, G. Wakefield, N. Waters, L. Craig, B. Howard.  
Back Row: Miss Lee, P. Shilling, I. Tippet, P. Cockrane, A. Sparks, Miss Adams.



### SENIOR B BASKETBALL TEAM

Front Row: A. Fish, L. Waddell, N. Waters, B. Scouller, D. Carter.  
Back Row: Miss Adams, J. Nichol's, B. Kluyer, E. Allen, J. Cullen, Miss Lee.

**Sixth Grade.**—Our most junior team, yet a vigorous infant from which the higher grades must draw their strength. Will finish fourth in section; points for 103, against 58. Has been ably led by Coward, assisted by his henchmate Foley, and considerably strengthened by the support of school players in Boyle, Coyle, Carr, McCune and McGregor. The "Twa Macs" have been a tower of strength. I look for big things from this team next year.

The club is going very close to winning the Silver Football, a trophy which has been held by the Ponsonby Club for over twenty years. This trophy in my estimation stands highest of all; it can be attained only by a Club sound at heart, whose players play the game in the true sense of the word, and all honour is due to those stalwarts, players, coaches and officials who have stuck to their jobs through all the lean years. We are also well in the running for the Southland Shield, a trophy awarded to the Club whose three best Junior teams obtain the highest number of Championship points.

During the year the Committee has conducted a series of dances with the object of obtaining funds to acquire our own ground and clubroom, and this objective is now nearly in sight. The dances have proved a big social success, and this can also be said for our annual dinner, which this year was held on the 17th October.

I have endeavoured to be as brief as possible; I am afraid I would want all the available space if I said all I would like to about the good chaps helping along the old game and Club, but in conclusion I do want to impress on readers, that there is a place for everyone in the Old Boys' Club, staff, parents and boys, and I sincerely hope this year will see every boy who is leaving the School, join up with his fellow old boys. Don't hesitate; obtain your membership form for the College Office now, or see me personally; get on the roll so that you will immediately be in touch with all our activities.

—R. F. Galbraith, Chairman, Management Committee.

#### BASKETBALL CLUB

The above mentioned club has a membership of 40 girls, all Past Students of the Auckland Technical College or Technical Colleges in other parts of New Zealand.

There are four teams, one in Senior B. Grade, one in Second Grade and two in Fourth Grade. Although none of the teams succeeded in winning the Championship in their grade, every player thoroughly enjoyed the season's games.

The Fourth B. Grade team succeeded in winning the Handicap Tournament held at the close of the season. This team deserved their win for the splendid way in which they played and also for playing so consistently all through the season.

New members will be very welcome and a very enjoyable season is assured them.

—M. Stonex.

#### LADIES' HOCKEY CLUB

For the last three years our club has been able to enter two teams, and affiliate with the Auckland Ladies' Hockey Association. In the 1930 season, the A. team was successful in the knock-out tournament, held at the end of the season, by gaining a silver vase for runner-up. This trophy of the Auckland Ladies' Hockey Association was played for, for the first time, so our club is the first to hold it.

Our club is also pleased to state, we have had a representative on the Executive Committee of the Auckland Ladies' Hockey Association for the past three seasons; also on the committee for the N.Z. Women's Hockey Tournament held in Auckland this year. This credit is due to our club captain, Miss E. Jeffrey.

During Country Week Tourney, several of our girls gained positions in the Auckland Junior Representative Team. Although Hockey is not one of the day school games, it is hoped that those girls who are interested in it will be attracted to the Past Students' Club and that they will be able to strengthen there, the bonds of friendship created during day school years.

—E. Jeffrey.

#### LADIES' CRICKET CLUB

An Old Girls' Club is in existence and in the season 1930-31, we were runners-up in the Junior Grade Championship. Several of our girls have ended the season with very good averages for batting and bowling. They have gained for themselves, a reputation for a high standard of play.

The club needs more members for the coming season, and as many girls commence cricket at the day school and some show a distinct aptitude for the game, the club cordially invites them to join up for the season now just opened.

#### TENNIS CLUB

Last year a Past Students' Tennis Club was formed to play on the College courts, and a very successful season was experienced.

About twenty players joined up and the club intends keeping the membership at about this number to ensure that there is no undue waiting between games. However, there are a few vacancies for the coming season.

There are two courts available for play at nights and on Saturday afternoons, and the subscription for the season is 30/-.

Further particulars may be obtained from, J. McKain, Native Department, Auckland.

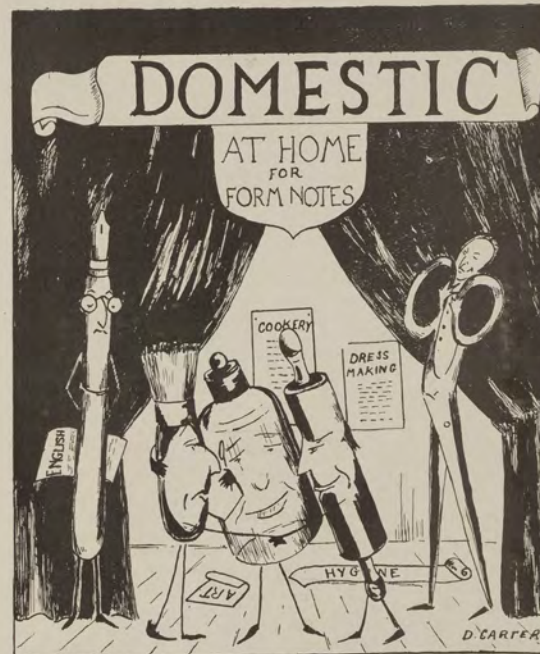
#### IN OTHER LANDS

##### SCHOOLS FIRST.

Although South Australia, with the rest of the world, is passing through an economic depression, the declaration of Premier Lionel L. Hill that education facilities must not be interfered with has given great satisfaction.

"While I hold the office of Minister of Education," said Mr. Hill, "the last thing that shall be sacrificed is the education of the children of the State. Let those who have struggled through life make further sacrifices, but let nothing be done that will retard the progress of the children. How can Australia hope to pull through if it does not pay the strictest attention to training the young people who are to follow us, and give them the opportunity to discern what is right and wrong in the destinies of the nation? The future welfare of Australia is wrapped up in the people's knowledge of its problems, and the ability to understand them."

The Premier holds that it is the duty of the State to provide some sort of disciplinary control for the children of needy parents for whom the Government is now providing food in the form of rations. Mr. Hill has issued orders that these children must not be allowed to go out into the streets; they must remain at school if they cannot get work, although they have completed the compulsory period of training.



#### Domestic 1

It is but a few short months since, in high spirits, we stood on our first day in the spacious hall of the Seddon Memorial Technical College. Since then we have experienced the joys and woes of secondary school life, and as much of our work is practical, done in Art and Dressmaking, Cookery, or Home Science rooms, we are perhaps better off than other secondary school pupils whose education is more general. It is said that the uses of fire were discovered 50,000 years ago and that ever since then women have been trying to cook. That may be intended as a joke, but any rate, our Cookery lessons are both interesting and thorough. They are closely connected with the theory of foods learned in the Home Science laboratory where we have been aroused to take an interest in Dietetics and even in our own weights. If interest in these things has already commenced and our practice of Cookery is made safe by the facts that Home Science teaches us, we're likely in the aggregate to be better cooks than our mothers.

In the next generation, foods will be prepared by scientific people and the community should be saved huge expenditures on hospitals, medicines, etc. A Hamilton doctor recently deplored the fact that girls

spent time on mathematics but neglected Home Science subjects. It does seem foolish.

In the Dressmaking and Art rooms, we have lessons from dress-making experts and University trained Art teachers. We have had a good start on sound lines and although our training has not gone far, we hope to develop in later life, both sound artistic taste and good needlecraft.

First year Domestic have varied their school work this term by a visit to Bycroft's Biscuit Factory. Much that they saw will add to their knowledge of Domestic work.

The girls have taken an active share in the basketball and sports of the College. Dom. 1A and 1B, have Rona Collins, junior swimming champion and Jean Armour, junior athletic champion. Dom. 1F, and 2A, have Mavis Cooper, senior athletic champion and Dulcie Simmonds, senior swimming champion. Several of the first year Domestic have won places in the teams selected to represent the College in matches with other schools. Many have taken an interest in the Dramatic Club and have roles to play in the annual concert.

Dom. 1F, and 2S, were glad to return from the dingy sunless room in the Old Grammar School at first given them, to Room 32, bright and sunny and overlooking Albert Park, the City's beauty spot.

A definition of "flippancies" given by one of the girls is worth recording. They were alleged to be "the little of the Phillipine islands."

### Domestic II.

It is with the utmost pleasure that we proceed to relate the story of our progress in the home of our ancestors! Here in this room of green, with the intricate geometrical pattern on the ceiling—a source of inspiration to many—we pass the most part of our lives in studying hard for our Free Places. And yet you may rest assured that we have our share of fun!

During the warm summer months Ye Olde Grammar School is almost a perfect paradise in which to pass school hours. But consider our feelings in the middle of winter when the rain is pouring down and everything outside is grey and sullen! It is then that a little of the warmth and comfort of the College would be appreciated. To make matters worse, when we exercise our cold, stiff limbs in the corridors we must walk under an aggravating sign hanging outside the W.E.A. Hall.

YE LEATHER BOTTEL  
A Cup of Tea and a Warm Fire  
at Ye W.E.A. BUFFET.

For us? Oh no! An engaging little terrier was once a great diversion. It was when we were in the throes of the Seven Years' War that an enquiring black nose poked round the door, immediately followed by a small wagging stump of a tail attached to a sturdy little body. With utter lack of self-consciousness he boldly advanced, head on one side, surveying with suspicious eye the coaxing girls around him. Sitting in a corner he steadily refused all pettings as he listened attentively with two ears pricked up to the stirring account of battles lost and won. Perhaps he liked the teacher's voice, or perhaps he

was a very well brought-up dog. Whatever it be, why did he chose to visit us during History, of all things? After a while he became bored—so bored that, poking out his tongue in an undisguised yawn he promptly fell asleep. (Could we but do likewise!)

It was a freezing day! Consequently our brains were rather numb and refused to give sensible answers (if any at all) to the History questions fired at us. Even that inspiring ceiling could not supply the information required this time. Consequently we tried hard to thaw our frozen brains with thoughts of lunch and heaters—but alas! the teacher who had waited in vain for the answer to her question (what patience she had!) at length burst out with: "If you girls don't pull yourselves to pieces—" A burst of laughter finished the sentence. A puzzled frown disturbed her usually serene countenance as she thought over her words. Dawn at length appeared and she joined in the laughter. Needless to say, the air was cleared and our brains were thawed!

However, you must not be under the impression that we are frivolous forms, even if one of our members 'did laugh once till her sides ached. There was surely justification for it in the Staff v. Council Basketball Match! No, there is nothing frivolous about us—we know that the ship called "Senior Free Places" comes into port shortly and we must be sure to secure our berths!

### Domestic III

Oh! for the touch of a vanished hand,  
And the sound of a voice that is still.

We often wonder if our teachers ever feel that way about us. Most of them will probably say that our voices will never be still, but that is merely because we like to be sociable. We have one teacher who does not think that way—quite the opposite, in fact—for she avers that when she asks us questions we just sit like stuffed dummies and look stupid. So much for public opinion! Place us between these two extremes and you will have us properly summed up. We are such a happy family that occasionally our mirth bubbles over and we break out into song (usually the latest "hit"). The other day at dressmaking an admiring audience was listening to one of our nightingales who in the exuberance of her spirits was chanting "You Will Remember Vienna," when our teacher asked us what it was supposed to be. Upon being informed she stated that she did not like it. We shall have to write and tell "movie" producers and directors to be more particular about the choice of these songs in future. However, in spite of all, with the speech contest in view we still agree there's nothing like practice in the quest for perfection.

By the way if more frogs or fairies are needed for the concert apply right here. We've just reached that point in the proceedings where we are beginning to look like them. We also add that we accept no responsibility for accidents to frogs' dresses on or off the stage.

Our love for one another is demonstrated by the fact that wherever one girl of Dom. 3, is seen the whole form is (with the exception of the prefects), not that the prefects don't love us, but, you know, those duties! The members of this form although only thirteen in number have sufficient sports ability to win their way to third in the form basketball competition. The fine fight the players put up to win third place, made the whole form proud to be wearing their patriotic colours of red, white and blue.



### HOW TO BECOME A GOOD HEALTHY CITIZEN GOOD HEALTH RULES.

1. Keep yourself clean.  
Brush teeth morning and evening and after each meal.  
Take a bath every day.  
Keep nails clean, hair brushed, and clothes tidy.
2. Go to bed early and get up early.  
Sleep nine or ten hours—with the windows open.
3. Drink six or eight glasses of water every day.
4. Eat three wholesome meals a day.  
Eat fruit every day.  
Eat two or more vegetables every day.  
Drink milk every day—a pint or more.  
Eat cereals every day.

#### BREAKFAST.

Fruit—raw or cooked.  
Whole wheat or oat cereal with milk.  
Eggs.  
Brown bread toasted.  
Milk or cocoa.

#### LUNCHEON.

Cream of vegetable soup.  
Salad—brown bread and butter, or  
Brown bread sandwiches filled  
with such fillings as:—  
Lettuce, date, or raisin and  
nut; lettuce, marmite and nut;  
lettuce, celery and cheese.  
Raw fruit or baked apple.  
One glass milk.

#### DINNER.

Meat, fish or eggs.  
Baked potatoes in skin.  
A green vegetable such as spinach, cabbage, celery, etc.  
A root vegetable such as onions, carrots, etc.  
Light steamed pudding or milk pudding.  
Cocoa or milk.  
A raw apple before retiring.

5. Have a bowel movement every day.
6. Have a physical examination at least once a year.
7. Have a dental examination every four months.
8. Get weighed. If underweight, work to come up to standard.
9. Exercise and play in the fresh air. Fresh air and sunshine every day are essential to health.



### Commercial I

Whereas the interests of the 1A's, at present, seem to be centred on the concert, those of the 1B's and 1C's are directed to the Horticultural Show.

Com. 1A. realise that they are renowned for their mischievous but whole-hearted fun, delightful to themselves, but positively abhorred by their teachers. One day they happened to be a trifle worse than usual and at the close of the lesson, were shocked with the news that they, the dignified Com. 1A., must be deprived of their sports afternoon. After working at History, their teacher suggested a walk. They were delighted at the prospect of going out into the open air, but there were so many hills to be climbed that they arrived back with aching legs, rather doubtful as to whether history or walking were the better occupation. In the coming concert, Com. 1A. is taking a brilliant and prominent part, several of the girls playing important roles, including that of Tommy, the leading boy.

Com. 1B. has little to report except that its noisy form-room has its good points, for, often a stammering answer is drowned by a passing tram or motor, and a lucky escape from detention results. The form is proud of its talented violinist. The Horticultural Show looming ahead has turned the members of the form into enthusiastic gardeners before whose onslaughts of lime, even the boldest slugs and snails creep fearfully away.

Com. 1C. have retained last year's form colours, and have selected for their form motto: "Play the Game"; the spirit of which they try to bring into lessons as well as sports.

We often hear the question "where is Com. 1C's classroom?" Well they are the most honoured form in the school, having a room richly draped with curtains of soft velvet and, instead of a bare wall to their room, there appears a most glorious country scene; a quiet road, bathed in sunshine, and on either side of it, lovely trees inviting them to their shade. So realistic is that picture that sometimes they are caught away, in thought, from school, until they are suddenly brought back from their reverie by, "all test-papers ready please"—! A storm may rage outside, but she who steps into C. 1C's classroom, steps into sunshine.

Last term they were able to donate £4 1s 9d, to the work that the Sunshine School was doing at Motuhi Orphans' Camp. This was accomplished by their united efforts in giving a concert and holding a jumble sale in the lunch hour.

They are now trying to acquire all the knowledge they can about slugs, snails, slaters, ugh! and the best fertilisers to use on their gardens.

Last term's history examinations brought forth some rather surprising statements. C.I.C. consider that few forms could produce more original ideas than the following:—

- (a) "The Bill of Rights was so called because it was drawn up during the reign of William and Mary, 'Bill' being short for William."
- (b) "Sir Robert Peel was a man who liked to go out hunting by himself very early in the morning." (D'ye Ken John Peel.)

### Commercial II

Commercial 2A. report on the trials and tribulations of their daily round. Thus they say: "We amuse (?) ourselves delving into the mysteries of book-keeping, trying to look intelligent and juggling hopelessly with figures which in desperation, resolve themselves at the last moment into Balance Sheets that balance.

Then we move on to shorthand. This period calls for three things—speed, speed and yet speed! Isn't it remarkable our shorthand skill dies a natural death when a test is in progress? Grunts and groans and sniffs are heard as we frantically struggle to keep up with that relentless voice.

English calls for a quality lacking in our form—imagination. In moments of madness we are forced to entertain a grudging admiration for others who, we hear, are evidently endowed with the qualities we so obviously lack.

If we are not gifted with brains, we at least possess a fair amount of brawn. This was proved in the form basketball matches when we were beaten in the final by one miserable goal. We also have in our midst three members of the 1st Basketball Team, while we are recognised by the Basketball captain as her refuge in times of need. The tennis season will soon be welcomed by us as we have several prominent players in our form. We have valiantly forfeited our pleasure—Tuesday afternoon—so that we may be covered in glory in the coming examinations.

Commercial 2B. report that in a History lesson last term the teacher was telling them about the Russian Winter when a girl in the class said: "Please Miss—who was he?" They would also like readers to know that "Every Friday they go in halves to Dress-making and Art." (This latter procedure probably accounts for the fact that their brains are still scattered when they return to school on the following Monday, Editor.)

One morning after the Scripture reading an awesome voice was heard to say, "Commercial 2B. stay behind for a test on the Scripture lesson." Strange to relate for once in the year, everyone seemed to have listened, and the class came out of the ordeal safely, despite their many preliminary misgivings.

Commercial 2 Special in the first year of their birth present greetings to all, and would like you to know that they are a band of really choice spirits, comprising thirty-four girls living to enjoy themselves and not to wear their brains out with overwork. They are esteemed



DOMESTIC SCIENCE CLASS AT WORK IN THE KITCHEN

for their good behaviour, strong vocal powers and great knowledge of labour-saving devices!

In their midst are several historians, one of whom recently brought to light the following interesting fact.

"The Maid of Norway was the Prince of Whales." They are renowned for possessing members of the School Basketball Team, two skilled musicians, a snail collector and an accomplished village gossip.

At the end of the year the form hopes to have its name engraved on the Drill Shield and to add further lustre to an already notable (or notorious) career.

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### Commercial III & IV

A is for Alpha who can't yawn or sneeze;

B is for Betty who dances with ease;

C is for Carron, for Clough and for Clark;

D is for Dempsey who likes a good lark;

E is for Edna who's best known as "Fuzz";

F is for Fisher whose tongue seems to buzz;

G is for Gwen with the carrotty locks;

H is for Hodsdon who has knowledge in stocks.

I is for Income Tax which embraces us all. A subject which is our only downfall.

J is for someone who sees we don't play;

K is for Kathleen who left us one day;

L is for Lucy that quiet, solemn girl (!)

M is for Martin who lost her long curl;

N is for Nora who's clever and brainy. On the stage she excels and is known as Miss Slaney.

O is for Order that is kept in our class, for shorthand exams we all want to pass.

P is for Parsons, for Pollock and Perry, and also for Pat who's so jolly and merry.

Q is for Quietness for which we are known, for always we talk in a low, solemn tone?

R is for Rene with a quiet little voice, when the teachers can hear it they always rejoice.

S is for Stella the brainy at book-keeping;

T is for Tyler our expert at sleeping;

U is for Utting the "swot" of the form, a brainier girl has never been born;

V is for Violet who's ne'er in a hurry, although the rest of us usually scurry;

W is for Winifred our champion giant, although in her work she is not so reliant;

X and Y are both hale and hearty, although as a rule they're exempt from our party;

Z is for zeal we use in our talk, and now that I've finished I'll put in the cork.

## House Notes

### BINNS HOUSE (Girls)

Captain Gwen Wakefield; Vice-captain, Lucy Craig.

On the whole this year has been a successful one for us, and we hope that when the points are totalled for the year, we shall hold a not unworthy place. Almost as soon as House arrangements had been settled, on the day of the Annual Swimming Sports, some of our members were able to prove their mettle. Dulcie Simmons won the Senior Championship for us and in House points, we won first place.

As a House, what we lack in results we endeavour to make up for in enthusiasm. So much, so that after certain basket-ball matches, when Binns was "in at the death," we were informed that the volume of noise that we had made, had distinguished us rather more than our play! Still, on such occasions, one must "let go," and when a House—over one hundred strong—goes through this process—it is bound to make itself heard!

At any rate there was more in it than just the shouting, for we topped the list in basket-ball points for the season, though Wellesley particularly, gave us many anxious moments. Several of our girls have represented "Binns" in the School basket-ball teams. This season, the standard of play has improved considerably, largely because all girls have taken part, and every girl has had the opportunity of several games each Tuesday.

Soon the Choir and Dramatic girls will be displaying their talent in the Annual Concert, and we are proud to say that one of our girls is being entrusted with one of the main parts. So in different ways our girls are doing their best to uphold the name they love to disclaim in the field—"Binns! Binns! Binns!" How ear-splitting the sound to a mere onlooker; what a stimulus to striving teams!

### SEDDON HOUSE (Girls)

Captain, N. Hodsdon.

Although this year Seddon has not been outstanding, we feel that we have reaped the benefit of our steady and consistent efforts, and if next year's pupils carry on with the keen spirit of House rivalry now existing, we hope to have better results.

**Swimming Sports.**—Here we were successful in obtaining second place but next year we hope to regain our former position. Both here and in the Athletic Sports we suffered to disadvantage of years and experience.

**Athletic Sports.**—Alas! In spite of our early morning runs and reducing exercises we regret to have to state that we attained the modest position of third. Better luck next year!

The House would like to express its indebtedness to the two House Mistresses for their capable management and hopes to give them the satisfaction of a brilliant season next year.

### WELLESLEY HOUSE (Girls)

Captain, Edna Perrin.

Once again the doings of illustrious Wellesley House are recorded in the annals of the "Seddonian." So far as sports are concerned the winter has been spent in basket-ball in which we rank second only to one, namely Binns, and we take this opportunity of congratulating them and saying how much we have enjoyed the strenuous games with which they have provided our teams. In athletic sports we triumphed gloriously, being well in advance of the runner-up, but in swimming we might say with Mark Antony "What a fall was there—my countrymen!"

We have more than our share of prefects and councillors, which in the eyes of any rational being is enough to show that ours is the "Quality House."

Hard times has fallen upon all, it seems. Even the unobtrusive House Room has been invaded by this cosmopolitan spectre. It has stretched forth its skinny hand and wrenched from the inhabitants the desire they once had of contributing freely to the funds. It is rather alarming when an assembly of six score girls produces two-and-nine-pence. In vain have we tried various means of extortion in an effort to restore our depleted capital. A depletion is largely due to the generous sums taken from our account and forwarded to the earthquake relief funds and other worthy causes. We have coaxed, threatened and promised—extending to all the prospect of socials and fetes at the end of the year, but still the contributions come not.

Many of our senior girls are nearing the close of their school careers, but we feel that the reputation of the House will be upheld by the juniors, many of whom show unequalled enthusiasm in the various sports activities.

### HINDLEY HOUSE (Girls)

Head, Miss Vickery; Captain, E. Amos.

Despite the fact that Hindley House has both the Junior and Senior Champions in Athletics, we are forced to realise that Hindley has not exactly shone this year.

At the Athletic Sports, we were cheered by the fact that we had gained the Championships, but this did not affect our points to any great extent, nor did our creditable efforts in some of the House events.

We enjoyed ourselves at the Swimming Sports, and although our members entered for the races in good spirit, our efforts proved of no avail.

We were very keen about Basket-ball, and believe that we managed to give our opponents a good game. The prospect of cricket is a brighter one, and we expect good results from this.

We have not come very high in the list of Houses, nevertheless we hope that we have displayed sporting spirits, and that next year Hindley House will figure prominently in all activities.

## Accountancy Classes

Two quotations from Presidents of the Auckland Chamber of Commerce:—

Mr. M. Stewart, February, 1931: "It is hoped the economy lead given by the Government will be followed promptly by all local bodies and that a general reduction in award rates will also be rendered possible, bringing with it an automatic cure—not palliative—of our present unemployment situation (which is largely a symptom of unduly high wage rates)."

Mr. A. M. Seaman, August, 1931: "The increasing popularity of the Auckland Technical College is largely due to lowness of fees."

At a meeting of the Council of the N.Z. Society of Accountants, Mr. G. W. Reid drew attention to the fact that some of the larger Technical Colleges had become competitors of the University. He regarded it as highly improper that the Technical Schools should undertake the higher branches of accountancy training. "If that goes on," he continued, "it means that all the work we have done to create a University standard for our training will be undermined." The Council appointed a Committee to look into the question and furnish a comprehensive report.

In the first place, Mr. Reid must know that the New Zealand University does not provide accountancy or any other "training"; it is an examining body, the training being provided by Colleges affiliated. The standard of training, however, may be measured by the results attained by candidates at University Examinations, and by this standard, the efficiency of the accountancy training at the Auckland Technical College has been higher than that of the Auckland University College during the past ten years.

It is remarkable that no member of the Council drew attention to the competition from Correspondence Schools or made a comparison between the efficiency of their teaching and that of the various Colleges providing such training. The significance of the omission suggests that competition that has depleted attendance at the University Colleges is to be made the subject of enquiry. Is this because University College lecturers are represented on the Council of the Society of Accountants?

Mr. Seaman may not be aware of it, but it is a fact that the accountancy students of the Technical College are attracted to the institution by the personnel of the staff. Indeed it is not unknown for the more advanced accountancy students to make requests to the Principal for particular instructors and for the Principal to meet such requests when it is possible to arrange it. We thank Mr. Seaman for an official acknowledgment of our increasing popularity: we regret, that despite our modesty, we cannot accept the explanation of it given by him.

It is hardly courteous of Mr. Reid to speak in such a manner without a better knowledge of the qualifications and efficiency of fellow-members of the Society on the staff of the Technical College. The Technical College has nothing to fear from competition. If any institution is to be eliminated on account of overlapping, the Government can hardly do otherwise than to discontinue the more costly and less efficient classes at the University College, which in any case, are not adapted for this type of technical instruction.

A member of the Parliamentary Recess Education Committee stated the position quite clearly when he said to a witness: "Then it

has been pointed out in evidence given before the Committee that there are a number of students of the University taking courses, including commercial subjects, and that in respect of those commercial subjects they could very well be catered for at the Technical Colleges, because we understand that students prefer to go there in the vast majority of cases."

These views were embodied in one of the recommendations of the Recess Education Committee as follows:—

"That every effort be made to develop the Technical Colleges as institutes for higher technical education for adults and adolescents in employment, and for the training of apprentices."

In this connection, before the same Committee, Dr. D. E. Hansen, of Christchurch made the following statement: "The New Zealand University Colleges, possibly in order to maintain a staff of reasonable strength, undertake a certain amount of instruction that is not really University work. Under this heading, I would classify accountancy, a great deal of the engineering work, a great deal of the home science training, pharmacy, etc."

It is being recognised more and more that accountancy forms an essential part of the training of the industrial manager. Production engineering is becoming a specialised profession, and in preparation for this there should be blended a sound knowledge of accountancy with the technical training usually provided in Technical Colleges.

**ECONOMICS.**—The high value set by students upon the work done in recent years by the Commercial Department of the College has been evidenced in the marked increase in the numbers of students availing themselves of the classes in the various subjects. In Economics, 53 attended this year as compared with 22 in 1930. As a result it was decided to divide the class into two, and though this has meant a sacrifice of half-an-hour by each class, it has on the whole been advantageous.

It has been interesting to observe the effect of the present difficult times upon the attitude of students towards the subject. There has been a great awakening of interest in the minds of the general public which has been reflected in the numerous articles on Economic topics in the daily newspapers and in magazines. This has greatly stimulated the interest of the class. On the other hand, the conflicting opinions of leading economists as to the causes of, and remedies for the present depression, together with the failure to solve the unemployment problem, have bred a certain distrust of economic theory in the minds of the students.

Attendance has been well maintained and the students have worked well, although far too many are inclined to place too much reliance upon dictated notes which are necessarily condensed, and narrow in scope. The importance of wide reading in Economics cannot be stressed too greatly.

**BOOK-KEEPING.**—Reports from these classes indicate that good progress is being made, especially among those classes preparing for University examinations. Absences are invariably accounted for satisfactorily, a common reason being detention at their occupation for extra work consequent upon retrenchment of staff, or periodical pressure of work. Notes from employers and parents generally indicate a desire to encourage the students to proceed with their studies at the College.

Instructors comment, however, on the lack of keenness on the part of a small proportion of elementary students who are not preparing for examinations. Parents are advised to note this and to encourage

this class of our students to be more ambitious. The division of book-keeping into three stages from next year should result in a more satisfactory grouping of the students.

It is a general experience that students who are most busily engaged during the daytime are the keenest on their work and punctual in producing the homework set.

Among the advanced classes we have a fine type of student and these men and women appreciate the fact that they are taught their subjects by skilled instructors. They are very much alive to the advantages of our methods of teaching and many have transferred to us from other institutions for this reason, not on account of difference in fees.

In all the classes for Stage I. Book-keeping, it has been found necessary to cover the whole syllabus during the year, and, when taking the elementary stages, the weakness of the training gained elsewhere has been clearly revealed. It is a remarkable fact, and a testimony to the students concerned, that among our best students are several who had learned no book-keeping before joining these classes.

Considerable interest and value is added to the lessons by the encouragement given to students to describe to the class particular aspects of office procedure and specialised systems of recording transactions with which their office duties have made them familiar. A wide range of valuable information is gained in this manner from students working in different types of offices.

In the Stage II. class, there is remarkably regularity of attendance and enthusiasm, and those who received a grounding in Stage I, at the College are doing particularly good work. In Stage II. work practically no new principles have to be learned, but the syllabus includes "all recognised systems of accounts," and the class has to be trained to deal with systems of accounts pertaining to many different types of business. In this connection also, assistance is derived from the specialised knowledge of students gained in the course of their office duties, which knowledge the students readily discuss in class.

**LAW SUBJECTS.**—Students have increased in numbers from 44 last year to 140 this year which is sufficient indication of the appreciation of Technical College methods of instruction. The change in the times of classes has been a great convenience to students, and attendance has been very satisfactory. In this department, the provision of a reading room equipped with books of reference would be of great value.

During the year an Accountancy Students' Association was successfully launched and several instructive and interesting lectures have already been given. It has been suggested that a great service would be rendered to students if they could be provided with a reading room containing a library of suitable books of reference. At present, study hours are spent outside the College and the provision of such facilities would be very much appreciated and help to promote the social side of this department of the work of the College.

#### SEDDON MEMORIAL TECHNICAL ACCOUNTANTS' STUDENTS' ASSOCIATION

A most interesting innovation introduced into the "night life" of the College has been the formation of an Accountancy Students' Association. This association is composed of members of the evening commercial classes and its functions so far have proved most successful.

Although to date only three evenings have been conducted they have all been very well attended (perhaps the "counter" attraction of supper had something to do with this) and appear to have been greatly appreciated by those present.

The first evening was devoted to an address given by Mr. Mills of Macky, Logan, Caldwell, Ltd., on "Machinery as a Mechanical Aid to Accounting." The lecturer's address and practical examples were of a most interesting nature and the machine-calculating carried out by his assistant, Miss Somerville, gave us all a practical example of what can be done by the "machine" as compared with manual labour in these days when speed counts for much and machinery is displacing human efforts in almost every occupation.

Later on in the season Mr. Buttle of the Stock Exchange took us into his confidence and led us through some of the inner workings of that financial institution. The unique type of this lecture appealed greatly to those present and a further address on similar lines would be sure of a good audience.

The third evening of the series was spent in the conducting of a mock court wherein a company promoter was charged with the issue of a rather "fishy" prospectus on the strength of which he had gathered in quite a respectable amount of cash from unsuspecting and foolish subscribers to the capital of his proposed company. All went well, however, and he was finally acquitted and left the court without a "stain on his character," but with probably mixed thoughts on the part of his erstwhile clients. This evening was conducted by students of the evening classes, very ably led by Mr. Bayly and two Auckland solicitors, Messrs. McLeod and Clarke who naturally knew their "job" better than the students, and gave quite a legal touch to the proceedings. Much amusement was caused by the various questions asked by Counsel and the replies given by witnesses, to say nothing of the actions of the Court Orderly, Mr. Morris, who very ably played the part of a large policeman.

The executive is to be congratulated upon the operations of the association and with a little more aid, both financial and personal, should go a long way towards assuring the future success of the undertaking, which is both a diversion from and help to commercial

#### The Advantages of Joint Stock Companies over Partnerships

In these days of financial depression with its accompanying keen trade competition many firms are realising the advantages that a joint stock company holds over the ordinary partnership business, and by a perusal of the daily papers it will be seen that the registration of companies both private and public is daily increasing.

An attempt is made below to describe some of the advantages of the joint stock company and may prove of interest to students of commercial subjects.

In a joint stock company the shareholders who compose the personnel of the company are liable in the event of liquidation of their company, only for the amount unpaid on the shares held by them, or if members of a company limited by guarantee, only by the amount guaranteed to be paid by them in the event of the company being wound up. On the other hand, the members of a partnership are liable not only for the amount of their respective capitals but may be also called upon to realise on their personal property in order to satisfy the claims of their creditors.

A shareholder can contract with his company, but under the terms of the Partnership Act (1908) this is not permissible in a partnership. Likewise a shareholder in a company may be a shareholder in another company carrying on a similar business, but under the Partnership Act, a partner of a firm cannot trade in a similar manner apart from his original partnership without accounting to that partnership for all profits received from his secondary undertaking.

A judgment obtained against a company is not available against a shareholder personally, but judgment against a firm is enforceable against the partners individually. There are restrictions on the powers of a company both as to its dealings with outsiders and as to its dealings with its members, but as between themselves partners may make what arrangements they please.

The shares in a company are readily transferable, but in a partnership a partner can only transfer his interest with the consent of all the other members. A shareholder leaving the country or for other reasons not desiring to hold shares in a certain company may have no difficulty in disposing of them, especially if the company should be a good dividend-paying concern, whereas a partner, in the same circumstances desiring to dispose of his capital in the partnership may experience great difficulty.

**ADDITIONS TO BUILDINGS.**—During the year a cloak-room and lavatory block is being built for the girls: the cost of this—£2,200 is being met by the Education Department. It should be a great addition to the facilities provided for the girls, and it will make available as class-rooms, two rooms formerly used as cloak-rooms.

The Board of Managers has also decided to erect an additional library and class-room so as to enclose that portion of the top floor at present left open, with the exception of a small piece at the south end, which we hope will be covered over before very long.

The addition of a room which may be used by classes for library purposes is in accordance with modern educational practice, and in so large a school as the Seddon Memorial Technical College there is need for teaching pupils the proper use of the library. The great variety of subjects which is taken by the College caused sectional libraries to be commenced in many different parts of the College, and to date, libraries as follows has been established:—Agricultural, Physical Science, Engineering, Mathematics, General Literature, Woodwork.

These libraries are, however, far too small. When the addition to the building has been completed, an endeavour will be made to increase the use made of the General Literature Section, and to arrange a system under which classes as a whole may use the library.

The library will also be used as a lunch-room, and will have attached to it, a small kitchen in which our more advanced Domestic Science girls will be able to have practice in the management and conduct of a Tea Room and Restaurant.



#### THE PREFECTS, 1931

Front Row: N. Waters, E. Flyger, E. Amos, J. Dallimore, N. Slaney, Cowperthwaite.

Back Row: J. Clough, H. Dallimore, J. Laking, A. Flyger, N. Hodsdon, Pollitt, M. Waters.



#### THE SCHOOL COUNCIL, 1931

Front Row: J. Clough, Stevenson, E. Amos, Miss Seay, J. Dallimore, N. Waters, Cowperthwaite.

Second Row: J. Cullen, E. McCook, G. Docherty, A. Flyger, J. Laking, Skyrme, E. Perrin, E. Flyger, N. Hodsdon, Early.

Back Row: M. Waters, Farquhar, G. Gosling, Pollitt, P. Corbin, H. Dallimore, N. Slaney, De Souza, H. Carron.

## MICHAEL FARADAY

"I have learned just enough to perceive my ignorance. The little knowledge I have gained makes me wish to know more."

Michael Faraday was born on 22nd of September, 1791, the son of humble working parents. His first work was that of errand boy to a bookseller and later he became an apprentice bookbinder. His early education was confined to a knowledge of reading, writing and simple arithmetic. His work gave him the opportunity to read many books and he became intensely interested in the scientific publications of the day.

He made simple experiments on the lines of the scientists of the period and attended what popular lectures he could afford; including some by Sir Humphrey Davy at the Royal Institute. These lectures made Faraday long to give his life to science. He wrote to Davy, enclosing the notes he had made of Davy's lectures and asked for a position where he could achieve his greatest desire.

The outcome of this letter was an interview with Davy and a position at the Royal Institution as laboratory assistant at 25/- a week with the use of two rooms in the attic.

His work gave him a considerable amount of leisure and he used it as a period of preparation which enabled him to appreciate and foresee possibilities in physical science hitherto undreamed of. However, Faraday never developed any great mathematical ability. Faraday was fortunate at the end of his first year under Davy, in accompanying Davy abroad as an assistant, and he visited many of the cities of Europe and met a number of the prominent men in science, forming friendships which lasted his life-time.

His first study was that of chemistry, and his first original contribution was the results of an analysis of caustic lime in 1816. This was followed by a research on the properties of different kinds of steel, a work which of itself was sufficient to place him in the front rank of his contemporaries.

About this time Oersted opened a new field of investigation by his discovery of the effect of a current carrying conductor on a suspended magnet, and it is by Faraday's work in this new and unexplored field that we know him best.

At this time an unfortunate episode occurred which caused him a great deal of anxiety; he overheard Davy and his friend Wollarton discussing the electro-magnetic discovery of Oersted and experiments Wollarton was making with the object of showing that a current carrying conductor would rotate about a magnet. Faraday in his thorough manner went to the heart of the subject, and succeeded not only in making a current carrying conductor rotate about a magnet, but he also made a magnet rotate about a current carrying conductor. Before publishing his results, Faraday tried to get into touch with Wollarton to refer to his views on the subject, but was not able to meet Wollarton and the results were published. He was accused of pirating the work of Wollarton and Davy and his explanation and apology were treated very ungenerously by both Wollarton and Davy. Davy had grown jealous of his assistant and even to the length of trying to oppose his election to a fellowship of the Royal Institution which two years later was granted because he was "eminently conversant in chemical science." Faraday's own words were, in later life, as the recipient of no less than ninety-five honorary titles and orders of merit, one title—namely the F.R.S.—was sought and paid for; all the others were spontaneous offerings of kindness and goodwill."

In 1825 Faraday became Director of the Laboratories of the Royal Institution and he organised Friday night meetings for the purpose of lectures and discussions amongst the members, and at these meetings Faraday proved himself a fascinating and brilliant lecturer, able to impart his own enthusiasm to his hearers. These Friday evening lectures have become one of the features of the Royal Institution. His as then known, but perhaps the greatest of all his discoveries was researches covered the whole field of chemical and physical science that of Electro-Magnetic Induction.

Oersted had shown that a wire carrying electricity could produce a magnetic effect. Faraday set out to reverse the arrangement and make a magnet produce an electrical effect.

In one of his experiments he connected a coil to a galvanometer and then placed a magnet inside the coil. He expected the galvanometer to indicate a current in the coil but it did not. Two years later he decided to repeat this experiment and this time he noticed what had escaped him before—that when the magnet was moved either in or out of the coil the galvanometer gave a slight deflection. When the magnet was stationary there was no deflection. This gave him the clue, and in series of brilliant experiments lasting only ten days he was able to lay the whole subject bare.

Apparently of only academic interest, these experiments with a few coils and magnets gave a greater impulse to industrial progress than any other experiments before in science. For Faraday had discovered the Principle of the Dynamo.

The electrical industry was born. Scientific men quickly built larger and larger dynamos, electricity became more readily available and its uses extended until to-day there is scarcely a home that in some way does not make use of it. Yet just one hundred years ago our forefathers had not produced even a candle that did not have to be snuffed. Truly Faraday's genius started a wonderful wave of progress.

As a man Faraday was quiet and unassuming, yet burning with scientific zeal within. Very fond of children he loved to give his small visitors electric shocks and other scientific experiences, or in more riotous moments, romp with them all over the great lecture hall.

Early in his career Faraday had to decide whether he was to devote his time to commercial or to purely scientific interests. As a consultant he could have, and actually did for a while, increase his income to several thousand pounds a year. Then he abandoned all commercial work and for almost the remainder of his life his income did not exceed "£100 per year together with house, coals and candles." But as Tyndall said, "his was the glory of holding aloft the nations the 'scientific name of England.'"

His last years were spent in retirement and after a long illness he died in 1867. He received at one time and another almost every scientific honour the world could bestow, yet to the last he remained the simple, kindly soul he had always been.

Among the successes in the Auckland University College Terms examination in October, was W. Cowperthwaite of E.L., who was successful in Mathematics and Applied Mathematics. Cowperthwaite has thus won the right to sit for a section of his B.Sc. degree.

## THIS MONTH'S BRIDGE PROBLEM

Players: A, Mrs. Black; B, Mrs. White; Y, Mrs. Brown; Z, Miss Jones.

Z has just dealt and bid two spades. In the ensuing two minutes, Z learns that A's small son has lost two sets of schoolbooks this year and that A doesn't believe that the boy's teacher takes an personal interest in him; also that A believes she will have to pass two spades.

Three minutes more are required for Z to learn that Y's daughter, Gracie, is going away to a boarding school next term, because Gracie brought the measles home from the primary school she attended the day Y and her husband had planned to go away for a nice little trip; that Y doesn't approve of public schools; and that Y passes.

Two and one-half minutes later Z knows that B's son, Jimmie, has been in the third standard two years, because he is much too bright for it; that he just isn't interested in such simple work; and that B simply can't bid a thing.

Z now—seven and one-half minutes after dealing—is left in with her two spades call. Her problem is to force a lead from A. A may lead from her son's lost schoolbooks, or through Gracie's measles, or up to the many years Jimmie is spending in that uninteresting third standard. Z doesn't care what A leads, so long as she leads something. It is possible, however, that A will not lead at all, as A, Y and B have left the present school system, and are discussing the terrible times they have trying to get their temperamental offspring to eat cabbage and other vitamins.

Can you help Z solve her problem? How is she going to get a lead from A? Would you suggest dynamite or a fire alarm?

## KING'S ENGLISH

We'll begin with box, and the plural is boxes,  
But the plural of ox should be oxen, not oxes;  
The one fowl is a goose, but two are called geese,  
Yet the plural of a mouse should never be meese,  
You may find a lone mouse or a whole nest of mice,  
But the plural of house is houses not hices.  
If the plural of man is called men,  
Why shouldn't the plural of pan be called pen?  
The cow in the plural may be cows or kine,  
But a bow is repeated is never called bine;  
And the plural of vow is vows, never vine.

If I speak of a foot and you show me your feet,  
And I give you a boot, would the pair be called beet?  
If one is a tooth and a whole set is teeth,  
Why shouldn't the plural of booth be called beeth?  
If the singular's this and the plural is these,  
Should the plural of kiss ever be known as keese?  
Then one may be that and three may be those,  
Yet hat in the plural should never be hose;  
And the plural of cat is cats, not cose.

We speak of a brother and also of brethren,  
An although we say mother, we mustn't say methren,  
Then the masculine pronouns are he, his and him,  
But imagine the feminine she, shis and shim!  
So the English all foreigners always agree  
Is the very worst language you ever did see;  
But God Bless Old England—the Land of the Free!

## ON WRITING LIMERICKS

W. N. Hewitt.

Limerick writing is an art. It offers to its more talented devotees, pleasure not without profit, and to those less gifted infinite amusement. It is the ideal playground for the cynic, the younger generation, the wit and the humorist.

Cry to Shakespeare for "blank verse;" grant to Homer the "epic;" leave to our satirists, our press, in fact to most of our poetically inclined contemporaries, the limerick.

This pithy pentagon of verse finds jubilant outlet for praise, deridation, cynicism, humour and advertisement. No place has the limerick for lingering metaphor or long bombastic rambling. Placid euphony and bounding rhythm must give speed and glibness to the polished product. For amazing diversity of subject the limerick cannot be surpassed. Into the syncopated space of five brief lines may be crammed a wealth of differing subjects. Love, the moon, cheese, the prime minister, may each be treated in serene or ludicrous aspect.

The "incidental" is the type most common and the easiest to write:—

Quoth the tourist on top of Mount Cook,  
"On polar excursions I'm shook,  
But I can't say I like  
A 10,000 feet hike  
Just to perch on a crag like a rook!"

The "satirical" persuasion comes next. It is the bane of the political man, and a humbler of those in high positions:—

A well-known pedagogue in the mood,  
Is certain he bowls like a Larwood;  
If cricket needs brains  
As do most other games,  
I'm afraid he is . . . well . . . not so good.

The "advertisement" must run smoothly and have a catchy rhythm:—

There once was a lady from Braxo,  
Who fed her 12 children on "Glaxo."  
We are proud to relate,  
And this mother will state  
How well they all grew. So eat stacks—O!

Much in demand is the "foreign" attempt. Only really foreign attempts are worthy of consideration, not English versions dealing with "spaghetti" and "onions."

Il yo un homme de Paris,  
Qui crie dans la nuit "sta Marie!"  
Mais son épouse si bete,  
Le frappe a la tete,  
Le pauvre malheureux de Paris.

But whether English or foreign, limericks amuse, convulse or enrage, one may yet contend they appeal to all.

## GYMNASIUM NOTES

During the year careful records of boys' weights and heights are kept in the Gymnasium, and it is interesting to note the average increase in weight made by the boys. Engineering 2, Business Training 1A. and 2; Woodwork 1B. and 2B.; Agriculture 2; and Metalwork 2B. —total 179 boys, showed an average increase in weight of 6½ lbs. between the 8th February and the 19th June. Chest measurements taken for the 1st Fifteen showed an average chest expansion of 2½in. Compared with a group of boys from Engineering 7., who do not play football, the 1st Fifteen had a very much better chest expansion; the expansion of the non-footballers working out at 1.76in.

It is doubtful whether parents or boys think sufficiently about the value of boys' field sports in developing sound physiques. Many parents think more of the possibility of a broken limb in connection with football than they do of increased chest expansion and muscle development; yet, accidents causing fracture of a limb are on the whole extremely rare, so that while 999 boys derive considerable physical benefit, only one boy suffers injury.

The average chest measurement (expanded) of the 1st Fifteen works out at slightly over 37in. for the sixteen boys concerned; and we are quoting the figures in order to see whether it is not possible to inspire other boys—all of whom know their own chest measurement and expansion, to realise the value of football, swimming and athletics in building up a sound constitution.

If more boys were wide-awake to the fact that the opportunity for doing this is ever so much greater in the secondary school years than at any other time, they would be far more serious in regard to this aspect of their training. There are, it is true, some boys who think of nothing but sport, and there are other boys who think of nothing but study; the wise boys will endeavour to attach equal importance to both branches of their work.

## SAVINGS

In 1928 the school undertook to collect deposits from students for the Auckland Savings Bank. This work has been carried out by the girls of Commercial 3 and 4, and has provided them with practical experience of financial transactions and given them training in accuracy of record-keeping. During the year 1928, 949 deposits were received amounting to £123; 1929, 895 deposits, £159; 1930, 862 deposits, £128. This year the deposits to date amount to 588 deposits, £170. Although the average deposit is only 3/6 (including initial deposits), and interest is allowed only on each complete £, yet it is interesting to learn that the sum of £24 1s 11d has been added as interest on the depositors' accounts.

At the present time there are 150 students' accounts opened, with balance at credit of £418, but a large number of these are not being operated on. This no doubt is due to the hard times through which most people are now passing. We suggest, however, that a great many of those who are not making deposits would be able to deposit small sums each week, even though they might only amount to a few coppers. The habit of Thrift is a valuable one and its neglect in early life has resulted in considerable distress among quite a number of cases where men were in receipt of substantial incomes, but had failed to put by "against a rainy day."

New accounts may be opened at any time on application to the collector visiting the class.

## ANNUAL SPEECH AND ESSAY COMPETITION

The annual Speech Competition promoted by the Past Students' Association took place at the College on October 27th. The judges were:—

Mr. E. James and Miss M. Stonex—Past Students' Association.  
Miss F. Lee and Messrs. Burley and Jones—School Staff.

The speakers had been previously heard by Mr. Park, and the entrants reduced to six who took part in the competition. The prizes were awarded as follows:—

## SPEECHES:

- (1) Norah Slaney.
- (2) Stuart Cowperthwaite.

## ESSAY COMPETITION

The competition promoted by the Past Students' Association resulted in the prize being awarded to Edna Perrin for an essay on "Friendship." Others deemed worthy of special mention were Jean Partington, Margaret Aylett, Jean Laking and Owen Fletcher.

## "FRIENDSHIP."

If we take a dictionary and run a finger down the column "fri—" we will at length stop at a word "friendship;" it will be defined as "an intimacy caused by mutual esteem." Should we study its meaning we come to the conclusion that this term has been extended to include many states of intimacy. This broadened sense of a happy state spoils the original beautiful thought. One is heard to speak of a mere acquaintance as a friend, does this show mutual esteem? It is impossible, for friends grow, and are not found at every turning.

"Friends are like diamonds—precious and rare." It may be that circumstances throw two people together, they introduce themselves, grow to have a liking for each other but they cannot be regarded as friends in the narrowest sense.

Let us together study a few examples of sterling friendship.

Among old fables we find Damon and Pythius, two men, reared in the same town, loved by and loving the same people, each man living for his brother-in-fortune. Their enviable characters we proved when, owing to an unpaid debt the one was imprisoned. Unless he paid by a specified time he would suffer death. Damon knew that if his comrade could leave the prison he would go to a creditor and relieve him of the required sum; he was imprisoned—how could he go? Ah! a brave thought. Damon visited his friend and exchanged garments with him; Pythius fled to the house where the money lay; it was a great distance off, Damon awaited him vainly for several days, now he was being pushed towards the scaffold; he slowly ascended the platform; the crowd wept; the noose encircled his throat; would his friend not come? Yes he was there on the outskirts of the surrounding populace. He pushed forward, lay the debt at his master's feet; the crowd cheered and left these real friends to console each other. These two were but friends to each other—there are many who have distinguished themselves by helping nations. Such a one was the devoted nurse and friend of the soldiers in Crimea, the renowned Florence Nightingale. We are all acquainted with the "Lady of the Lamp" as she is known. She introduced the war-time nursing system, left her native land for the turmoil of the battlefield, and there

performed her gallant deeds for which her name is written in gold in the annals of British History. What more could woman do for her country?

As a character of George Eliot's says: "A dog is as good a friend as a Christian man. Dull is the soul of the man who knows not a single story of animal friendship. While yet in the nursery we learn of the devoted dog who, when his master died, lay on his tomb and starved, while every day we are told of the love of some domestic animal.

For the benefit of those who do not delve into the classics, the following story may be interesting. As a reader of "The Mill on the Floss" knows, Tom's father had been declared bankrupt and all saleable goods and chattels had been auctioned. Bob, with whom Tom had fought and played as a boy, came to Tom offering him ten sovereigns of his hard earned savings besides many rough words of consolation and argument. Tom would not receive the gift but he cherished Bob as a friend in need and became a devoted companion.

Do we make friends? Rather they grow, or perhaps as L. M. Montgomery has it, we find a "kindred spirit," one whose inner feelings are identical with those of ourselves, one who esteems us as we esteem them. In this hurried life we, more or less, become acquainted through circumstances, and it is rare that we keep our friends from childhood to the grave. Of few it may be said:—

"In death they were not divided."

## MANUAL EDUCATION

A tendency in current literature on educational subjects to extol and exalt a standard of living which was purely cerebral was criticised by Sir Arnold Wilson in addressing the Modern Churchmen's Conference at Oxford. He said it was the cause of much unhappiness and discontent. The glories of modern science, of all art, of architecture and of music and the compassionate arts of surgery, and even of medicine, depended ultimately on the use of our faculties—our eyes, our voices and especially our hands. A purely intellectual standard of life entailed misery, futility and eventual decadence. Literary men, professors, thinkers, philosophers, preachers, teachers and politicians had their place in life, but skilled manual workers were the real creators of a civilisation. If modern education had insisted more on hands than brains, civilised man would be more independent and therefore happier, and less prone to believe that the individual had an indefeasible claim on his fellows in the person of "the State," independently of any services he might have rendered or be rendering to it. The results of the present system were for all to see—vast numbers of poverty-stricken intellectuals who could not use their hands to any useful purpose. Men unable to paint their houses or to effect even the simplest repairs, unable to understand what was wrong with the simplest mechanism and obliged to call upon a semi-skilled workman to perform the simplest task. Women unable to sew or cook, or to look after children, are miserable because they could not afford to pay for others to serve them. Recent legislative changes, which had tended to make a great proportion of the nation look to "the State" to provide for them from the cradle to the grave, had their counterpart in previous ages. The results had invariably been disastrous.

## PUPILS' CONCERT

The annual concert took place in the Assembly Hall on Friday and Saturday, October 16th and 17th, and was well attended on both nights, the proceeds totalling about £85, which will materially help the Pupils' Fund. This year's play "Pinkie and the Fairies" gave scope to elocutionary talent, to solo and chorus singing, to the orchestra, to the dressmaking and millinery classes, to the lighting experts and to the orchestra.

In all these respects as in that of the beautiful scenery painted by Mr. Ash and framed by the Woodwork classes, we had reason to be well satisfied with the result. The business management was well handled by Mr. Jones and his commercially minded girls.

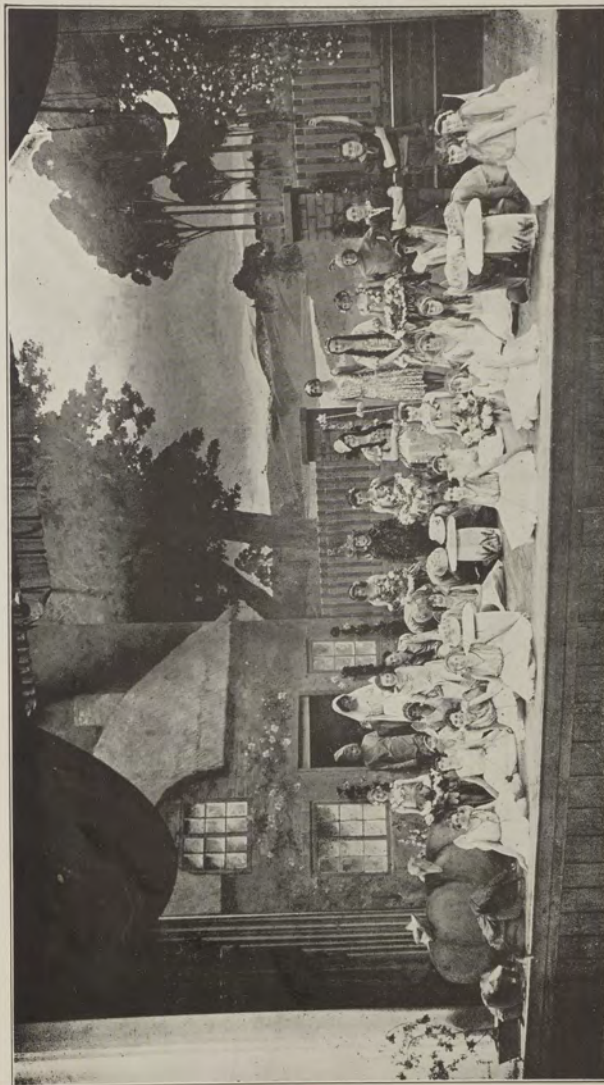
The play opened with an evening garden scene where the two principals, Pinkie (Victoria Dew) and Tommy (Dorothy Dreaver) presented themselves and at once put the audience into a sympathetic mood. Both were quite at home and portrayed their parts realistically and naturally. The two aunts—Caroline (Norah Slaney) and Imogen (Myrtle Yearsley)—representing types which belong to the severely prim and proper period of bygone times caused much amusement, and Uncle Gregory (Harry Dallimore) played the part of the ancient, bewhiskered, lumbago-stricken, old bachelor very well indeed, his make-up and voice suiting the part admirably.

The three elfs (Jean Partington, Joyce Caitchon and Leila Goldsmith) were good both in their elocutionary work and in their solos, improving considerably at the Saturday performance.

In the night scene, the lighting experts (Messrs. Martin and Sloan) working under Mr. Closs' control, produced some beautiful effects, when pretty fairy dances, a weird midnight supper (in which fairies, frogs and visitors joined), and Cinderella in her coach were shown to the best advantage. Even the rising moon was successfully staged and though it rose nearer to the watcher than is usual, its carefully controlled ascent was tribute to a patient manipulator. Spot-lights and floods (white and coloured) took turn with foot-lights and overhead lighting. The success in this department was the result of a great deal of sacrifice by the student teachers, whose spare time when examinations are near, is not abundant.

The close attention given to the performance indicated enjoyment on the part of the audience. Behind the scenes, things were very orderly, the stage manager, Mr. A. B. Thompson, giving great service, as he had done during the rehearsals of the last two weeks. The incidental music was supplied by the College orchestra under Mr. Gemmell and the dressing was made by the classes under Miss Kitson.

The production of more ambitious plays in which all the senior boys and girls will take place is bound to come in the near future. Such productions provide splendid opportunities for boys, girls and staff to co-operate in a common cause, and by hard work, forethought and the spirit of helpfulness to produce a result worthy of the College. In a College, such as ours, the annual concert is a means whereby the great diversity of talent brought together here may be shown in a practical way to the public, who provide the funds necessary for the maintenance of the institution of which we have reason to be proud.



Scene from "Pinkie and the Fairies"

## PINKIE AND THE FAIRIES

## AN APPRECIATION.

Those who were fortunate enough to attend the College concert were transported for a few hours to the land of fairy enchantment; and this is a good tonic for grown-ups as well as for the young. An understanding of the meaning of the message so beautifully delivered across the footlights must have come to all in whom at least a spark remained of youthful memories or a gleam of romantic vision. Without these, life would be dull indeed, and although, when past the age of childhood, the yearning for romance and make-believe may find expression in different ways, those ways may not be so completely wholesome and satisfying as the fairy make-believe of childhood.

To Pinkie and Tommy and all healthy-minded boys and girls is given the power to transmute the joys of nature into lovely imaginative thoughts, adding to them a personal association that makes them part of Nature's wonderful story-book. The sunset and sunrise are pictures more glorious than any human hand could paint; they thrill to the magic song of birds, and into the pale atmosphere of moonlight, they bring fairy fancies and rich banquets of story and fable that add colour and life to all about them.

The Aunts and Uncle Gregory make pathetic figures and they typify the dreary emptiness of the lives of those in whom the spark of romance has been dimmed by convention and self-righteousness. The spark is but hidden and the breath of romance from Molly's engagement and the dancing children about them, make it glow again for a little while.

The children's love for Nature's beauty and their power to weave its romance into their own lives, their spring-time faith and joyousness are treasures more precious than gold, and he is poor indeed who in later life turns away from so rich a store. As childish fancies pass away, a fuller, richer joy may be found as we gain in knowledge of the wonders in the world about us, learn to read their inner meanings, and more than all, to feel the glow of human love and friendship.

—H. A. Jones.

## PRINTING WITH LINOLEUM BLOCKS

These illustrations, linoleum blocks, were designed by the girls for reproduction in the "Seddonian."

When the printed page replaced the manuscript, men invented a process of printing pictures to illustrate their books. A design was drawn upon a wooden block which was then cut in relief with a sharp knife, the ground being cleared with a gouge.

The block was next covered with printers ink and an impression made with it upon paper—of course, the pattern which stood out in relief would leave its imprint on the paper.

Linoleum is usually substituted for wood in school work as it is softer and therefore easier and quicker to cut.

To illustrate school magazines with prints from linoleum blocks is simple and economical, but there is another purpose that the teacher has in view when he suggests that his pupils should print some linoleum cuts. It is the valuable training in designing which it affords.

The limitations imposed upon the young artist by the material are such that he cannot fail to realise the importance of distributing well the lines and masses, and that is, of course, the basis of all good composition.

### " THIS IS FAIRY LAND "

This is fairy land!

Can't you see the little magic lamps twinkling; the dainty little fairies dancing, the capering, rolling elves dressed in green; a wisp of a fairy dancing by, clad in the finest of spider-web silk; the thousands of minute lanterns painted by tiny fairy hands. Can't you hear the bell-like voices of fairies, the bubbling of the marble fountain; the merry twitter of birds, the happy laughter of brown and gold elves. Can't you smell the sweet perfume of fairy flowers; and of honey sandwiches. That enormous, white, marble building over there is the Queen's Palace—you must show that you respect and honour her. Crawl along on your hands and knees as the Queen is very proud and haughty. Touch the door-knob! Ah! You are growing smaller. Come and go into the palace. Be a fairy! trip it! trip it lightly! Dance and be a fairy. Hush, here we are! There is the Queen, does she not look exquisite? Look at her shimmering gown; her wonderful braid of hair; her sparkling gems. Would you not like to own those costly jewels. Look! the Queen is beckoning to you, go before she gets angry. Oh! She has pointed to the poisonous gas! You must die. The elf is coming over to you with it; look at the wicked gleam in his eye; he is holding it over your nostrils—!

Wake! Wake! One! Two! Three!

A dazed and ruffled man left the platform among a laughing crowd.

The hypnotiser bowed and withdrew from the stage.

—Iris Ross.

### EVENING SCHOOL DRAMATIC CLASS

This year for the first time a Dramatic class has been formed during the evening.

From the beginning, great enthusiasm was displayed by the members. It was not long before plays were being rehearsed, and during the second term a series of three plays was presented in the Assembly Hall; these were thoroughly enjoyed by all who were present. As a result the Pupils' Fund benefited to the extent of £17. At the present time two further plays are being undertaken and we hope to do these early next year, as time will not permit this term.

Next year we are looking forward to the return of all old members and the arrival of plenty of new. We might yet produce a "Henry Ainley" or a "Tree"—who knows?

—"The Odd Man."

The Cadet Battalion was inspected on October 29th by Colonel J. E. Duigan. He was accompanied by Captain Judson, V.C., Area Officer and the Principal. After seeing the various sections (Physical, Ambulance, Signallers, Musketry, Machine Guns, Band, etc.) at work, Colonel Duigan addressed the cadets, complimenting them on the variety and efficiency of the work.

### HOUSE NOTES

#### BINNS HOUSE (Boys)

By some inexplicable turn of fortune Wellesley House is at present leading in House points. Still more inexplicable is the fact that Binns is third. Moreover, it looks as if we shall stay third, for Seddon shows signs of increasing its lead on us, while it is unthinkable that Hindley should move from its present position.

In all sports we have had about the same measure of success, namely, very close to Seddon for second place. Our Rugby firsts never lost a game, but our seconds never won one. In athletics we tied exactly with Seddon, both a few points behind Wellesley.

The swimming started very badly for us, but some valiant efforts by Robinson and Waretini gave us a fairly respectable total. In cricket, we are again very close to Seddon, being about 2 points behind in 150.

Two of our representatives, Brown and A. Flyger, succeeded in breaking two records which have stood for many years. Brown broke the record for the hop, step and jump, with a fine leap of 41 feet, while A. Flyger won the high jump with a leap of 5 feet 1½ inches. These two were also the only ones to succeed in winning their events in the Inter-Secondary School Sports. E. Flyger, this year's House captain, gave some splendid performances in the cycling events, while Mitchell ran splendidly to win the mile.

Some good performances in the cross-country run and the third term cricket may enable us to overtake Seddon's lead. At any rate, whatever the result be, let us prove ourselves keen opponents to all comers, and worthy to strive under the colours of Binns.

#### SEDDON HOUSE (Boys)

During the year Seddon House has been gradually improving its position with regard to House points until with only two months of the 1931 season to go, the House fills second place with a total of 103.3 points. The members of the House must be congratulated on the splendid interest which has been prevalent all the year. Much credit is due to Stevenson who with a brilliant performance easily annexed the senior athletic championship. H. Dallimore, too, put up a creditable performance as runner-up for the senior swimming championship. The consistency of our House is apparent when one reads the following summary of our efforts in the various competitive activities.

**Cricket.**—In the first term our teams were slow in settling down, but this we have no doubt will be rectified in the third term.

**Rugby.**—Although we were by no means outstanding we were not vanquished; Seddon House is second.

**Soccer.**—Our First Eleven distinguished itself by not losing a game.

**Swimming.**—Here again we met with a fair measure of success and were a good second.

**Tablet Athletics.**—On the first day of this competition, designed to test the consistency rather than the brilliancy of a House, we proved that we had fewer unfit boys than any other House, by getting placed in all thirty-six events and coming first in twenty-two of them. We were easily first in both the Senior and Junior Competitions.

## WELLESLEY HOUSE (Boys)

Captain, A. Kay.

The House points at the time of writing show that Wellesley have once again a very strong claim for the Shield. The boys of the House all realise that it is to Mr. Lawrie that most thanks are due for he has done a great deal in their interests. We started the year well, carrying off the Swimming Sports (thanks to Arthur Kay) but that was only a start, for in the Athletic Sports we again came first. The football and cricket results are rather flattering, for Wellesley beat Hindley for first place in the cricket, and Seddon for first place in the football, and it only remains for us to see what we can do in the cross-country run.

The boys of Wellesley House can indeed congratulate themselves on the fine showing they have made this year. The House points are:—

Swimming 76, 1st; cricket, 42.3, 1st; athletics 30.6, 1st; Football 68.3, 1st.

## ANNUAL CROSS-COUNTRY RACE

In the splendid running weather, over six hundred boys took part in the cross-country race of the Seddon Memorial Technical College this afternoon. The course of three-and-a-quarter miles is from the grandstand at the Inner Domain across country to Manukau Road, through the Drive to Stanley Street, up Grafton Road, thence round the Exhibition Drive to the finish at the pavilion.

Three competitions were held this year; junior, intermediate and senior, and in all three very close finishes were recorded. Owing to the re-arrangement of the age groupings, times are not available in the junior and intermediate contests. In the senior competition Brewer reduced by 28 seconds the record established by Darley (1928) and equalled by Brewer last year. Mitchell (19m. 8s.) also broke the record. Nicholson, who established the fastest time for the juniors, is a son of J. W. Nicholson the well-known Auckland distance runner who recently ran fourth in the twenty-mile cross-country race in Wellington.

The following are the detailed results:—

JUNIOR (Under 14½).—1. Windsor (2m.); 2. McLeod (2m. 20s.); 3. Clement (2m. 20s.).

Fastest Time.—Nicholson (scr.) 22m.

Second Fastest Time.—Evans (20s.) 22m. 6s.

INTERMEDIATE (Under 15½).—1. Waters (15s.); 2. King (1m. 20s.); 3. Bowden (3m.).

Fastest Time.—Waters 19m. 40s.

Second Fastest Time.—Best 20m. 48s.

SENIOR: Previous Record 19m. 19s. (Darley 1928, Brewer 1930).—1. Russell (3m. 40s.); 2. Wright (2m.); 3. Brewer (scr.).

Fastest Time.—Brewer (scr.) 18m. 51s. Record.

Second Fastest Time.—Mitchell (scr.) 19m. 5s.

Third Fastest Time.—Lund (2m.) 20m. 8s.

The House points for the whole competition were as follows:—Wellesley House 233; Binns House 220; Seddon House 142; Hindley 125.

## PROFESSIONAL ASSOCIATIONS

Students of the College may find it of value to have a list of the professional bodies of which it may be desirable from them to seek to become members. In the opinion of many people, membership of one of these institutes or associations is as valuable a qualification as a University degree. To become a member, it is usually necessary to have passed the qualifying examinations and also to have had good practical experience. Moreover, it is usually possible for the young man to study for the examinations whilst engaged in his usual occupation. Space is too limited here for us to give much detail but those interested may write direct to the secretaries at the addresses given for fuller particulars.

## THE INSTITUTION OF MECHANICAL ENGINEERS.

Address: Storey's Gate, Westminster, London, S.W. 1.

Students are between 16 and 25 years of age and must be serving an apprenticeship or be full time students of a College. They must pass the Studentship Examination, the subjects being General Knowledge (English, Geography, History), Mathematics, Mechanics, Physics or Chemistry and a modern language (optional subject).

Graduates must be over 21 years and must pass the Associate Membership Examination. The subjects for this examination are:—

## Section A.

- (1) A Modern Language.
- (2) Applied Mathematics.
- (3) Physics and Chemistry.

If candidates have passed the Studentship Examination including the modern language, they are exempt from Section A.

## Section B.— Three subjects to be taken.

- (a) Theory of Machines and Machine design (compulsory).
- (b) Properties and Strength of Materials (compulsory).
- (c) One of the following:—

- (1) Steam and the Steam Engine.
- (2) Internal Combustion Engines.
- (3) Hydraulics and Hydraulic Machinery.
- (4) Electro Technics and Mechanical Design of Electrical Machinery.
- (5) Metallurgy.

## Section C.

Economics of Engineering.

## THE INSTITUTION OF ELECTRICAL ENGINEERS.

Address: Savoy Place, Victoria Embankment, London, W.C. 2.

There is a Graduateship Examination open to anyone who wishes to qualify in Electrical Engineering. This examination consists of the subjects below:—

## Part 1.

- (a) English Essay or translation into English from French, German, Spanish, etc.
  - (b) Applied Mechanics including Strength of Materials.
  - (c) Heat, Light and Sound or Chemistry.
  - (d) Electrical Technology.
- Institute Examination held about April in each year. There are

## Part 2.

For most students the best way of satisfying Part 2 is to pass the Final Grade Examination of the City and Guilds. There are no examinations for the Associate Member but the age must be 26 years.

#### THE INSTITUTION OF CIVIL ENGINEERS.

Address: Great George Street, London, S.W. 1.

Students must be between 13 and 25 years of age. They must pass the Preliminary Examination, the subjects for which are:—

- (1) English including History and Geography.
- (2) Mathematics including Arithmetic, Algebra, Geometry and Trigonometry.
- (3) A language other than English.
- (4) One of the following: Mechanics, Physics, Chemistry.

There is also an Associate Membership Examination, the subjects for which are:—

##### Section A.

- (1) Mechanics.
- (2) Strength of Materials.
- (3) Electricity and Magnetism.
- (4) Theory of Structures or Theory of Machines.

##### Section B.—Two subjects, not more than one from each group.

Group 1: Geodesy, Stability of Ships, Applied Electricity.

Group 2: Hydraulics, Metallurgy, Thermo and Electro-Chemistry.

Group 3: Geology, Mineralogy, Applied Chemistry, Theory of Heat Engines.

##### Section C.

Engineering Drawings, Specifications and Quantities.

Our bodies in which students may be interested are:—

#### (1) THE INSTITUTION OF AUTOMOBILE ENGINEERS.

Address: Watergate House, Adelphi, London, W.C. 2.

The Institution Examination syllabus comprises:—

- (a) Mathematics including Trigonometry and Measurement.
- (b) Mechanics.
- (c) Strength of Materials.
- (d) Motor Vehicle Problems.
- (e) Heat.
- (f) Electricity.
- (g) Meaning of Physical and Technical Terms.

#### (2) THE INSTITUTION OF STRUCTURAL ENGINEERS.

Address: 10, Upper Belgrave Street, London, S.W. 1. . .

##### Graduateship Examination.

- (1) Principles of Statics and Theory of Structures.
- (2) Strength of Materials.
- (3) Three subjects from:—
  - (a) Chemistry.
  - (b) Physics.
  - (c) Hydraulics.
  - (d) Geology.
  - (e) Surveying.

##### Associateship Examination.

- (1) Theory and Design of Structure.
- (2) Practical Design (Concrete or Steelwork).
- (3) Reinforced Concrete or Structural Steelwork.

#### (3) THE RADIO ASSOCIATION.

Address: 22, Laurence Pountney Lane, London, E.C. 4.

##### Associateship Examination.

- (1) Algebra to the Binomial Theorem.
- (2) Geometry—Euclid I. to IV.
- (3) Trigonometry.
- (4) Engineering Science—Mechanics and Physics.
- (5) Magnetism and Electricity including A.C. work.
- (6) Radio Telegraphy and Telephony.

##### Fellowship Examination.

A knowledge of Mathematics and Engineering Science is involved in the questions set.

- (1) Analysis and Geometry—Calculus, conic sections and higher Mathematics.
- (2) Engineering Science—Applied Mathematics, Theory of Machines, Strength of Materials, Heat Engines, etc.
- (3) Magnetism and Electricity—D.C. and A.C.
- (4) Radio Telegraphy and Telephony.

#### (4) THE INSTITUTION OF HEATING AND VENTILATING ENGINEERS.

Address: 12, Russell Square, London.

##### Associate Membership Examination.

- (1) Mathematics.
- (2) Mechanics.
- (3) Geometrical Drawing.
- (4) Physics and Combustion of Fuel.
- (5) Pipes and Fittings, Hot Water Supply.
- (6) Heating.
- (7) Ventilating.
- (8) Building Construction.
- (9) Working Tools.

#### (5) THE ROYAL SANITARY INSTITUTE.

Address: 90, Buckingham Palace Road, London, S.W. 1.

#### (6) THE INSTITUTE OF BUILDERS.

Address: 48, Bedford Square, London, W.C. 1.

...EXAMINATIONS.—There are comparatively few examinations suitable for testing the work done in Technical Colleges. Examinations of the kind that have in the past been taken test ability of only one type, while it is freely recognised that there are other types of ability, perhaps even of a superior kind which present examinations do not test. Diversity of courses in Secondary and Technical Schools is recognised by educational people through the world as being essential. Probably for examinations of the future there will be very wide syllabuses, including practical work, so that tests may not be suited to one type of ability only. There is even at the present time, a fairly wide range of examinations for which entries are made. The number of candidates from the school for whom entry forms has been forwarded through the College Office are as follows:—

|  |    |
|--|----|
| N.Z. University Entrance Examination . . . . .     | 54 |
| Accountants' Preliminary . . . . .                 | 44 |
| Public Service Entrance . . . . .                  | 23 |
| Ruakura Scholarship . . . . .                      | 2  |
| Technological—Carpentry & Joinery . . . . .        | 9  |
| Cabinetmaking . . . . .                            | 4  |
| Bldg. Construction . . . . .                       | 4  |
| Motor Mechanics . . . . .                          | 7  |
| Plumbing . . . . .                                 | 11 |
|  | —  |
|  | 35 |
| City & Guilds—Electrical Engineering . . . . .     | 43 |
| Public Service Commissioner's Shorthand            |    |
| Typistes Examination:                              |    |
| Junior . . . . .                                   | 31 |
| Senior . . . . .                                   | 17 |
| Intermediate . . . . .                             | 2  |
| Special . . . . .                                  | 1  |
|  | —  |
|  | 51 |
| Survey Cadets Examination (Trigonometry) . . . . . | 1  |

## Cricket Notes

1ST XI.

The 1931 season appeared rather bright for the 1st XI, as seven of last year's regular players had returned back to school. This had also happened in other schools, as we later found out. In the first term Farquhar and McGregor were selected in the Auckland Secondary School Representatives to play against an Auckland team composed of senior players. Our first match against Mount Albert Grammar School ended rather disastrously, being defeated by an innings. However, in our second match against Auckland Grammar 1B, we managed to win by an innings. The wicket suited our bowlers who put them out for a small total in each innings.

Again this year we had another exciting match against Takapuna Grammar. In the second innings they needed 55 runs to win and had to obtain them in just over an hour. Seven of their wickets fell cheaply before they managed to obtain the required number of runs. We lost by 3 wickets.

Our annual match against Pukekohe ended in our favour, as Pukekohe needed to make sixty more runs with three men to obtain them before they reached our total. The remaining matches yet to come are against Auckland Grammar and King's College.

Results are as follows:—

Versus M. A. G. S. at Grammar, Mount Albert 243 (Farquhar 3 for 31, Munns 3 for 55, Cowperthwaite 3 for 33); School 129 and 64 (A. Flyger 25, Foley 35, Cowperthwaite 3), lost by an innings.

Versus Auckland Grammar 1B at Grammar, A. G. S. 99 (Farquhar 6 for 28, Munns 3 for 29), 2nd innings 64 (Farquhar 7 for 35); School 158 (McGregor 49, Farquhar 18, Evans 1), won by an innings.

Versus Takapuna Grammar at Mount Albert, Takapuna 1st Innings 203 (Farquhar 7 for 84, Munns 3 for 52), 2nd Innings 56 for 7 wickets (Cowperthwaite 5 for 10); School 1st Innings 89 (Cowperthwaite 23), 2nd Innings 166 (Flyger 46, Farquhar 41), lost by 3 wickets.

Versus Pukekohe at Domain, Pukekohe 7 for 49 (Farquhar 4 for 28), Munns 2 for 13); School 104 (Flyger 26, Foley 25, Munns 15), no result.

Since the first term, the 1st XI has lost its wicket-keeper and a bowler, and here is the opportunity for some of our younger players to make a place for themselves in school cricket. If the young cricketers will consider the N.Z. team at present concluding its tour in England, it may interest them to remember that Vivian took several Technical wickets in our first match in the first grade of the Secondary Schools competition in our match against Mount Albert Grammar. Our coach played against Lowry when he was in the 1st XI, at Christ's College and had the pleasure of playing with James at the Wellington College and Matheson at Auckland Grammar School. Our first XI, in particular, your school cricket in general, is one of the nurseries for the New Zealand XI's of the future, and whilst players like Jack Hobbs are born, any boy with a good eye and the keenness to try and try again can get into the first flight, and our 1st XI is one of the foundations of Auckland cricket.

Cricket is a game which teaches us to be true sports and to play the game not only for ourselves but for the team and school in a way which can only be felt out on the green fields with the sun blazing down, the last man in and a couple of runs to get. When we feel the thrill of that moment, we are good cricketers and good

## Lino. Cuts by the P



Lino. Cuts by the Pupils of Miss Pilling's Domestic Art Classes



## Pupils of Miss Pilling's Domestic Art



citizens. What we want at present is a left hand bowler to spell Farquhar. We don't mind if he is no good, but if he is keen we will make him good; we also want a boy with a good eye and hands that can catch. The N.Z. team of 1936 wants a wicket-keeper, and so do we.

### THE TEAM.

**Farquhar (captain).**—When on his length and not trying to send them down too fast, a splendid bowler. Remember for a left hander the ball must never pitch inside the middle stump. Turning away, the off stump is the mark. A promising bat who needs to keep the bat straight when on the offensive as well as the defensive. Keep your men up to the mark in the field, every man on tip toe anticipating the next stroke.

**Dallimore J.**—A splendid catch in the field, stiff in batting and liable to have a go at a ball that should be played.

**Flyger A.**—A most promising bat, with nerves the chief trouble. A good field but tends to get a bit slack at times.

**Flyger E.**—A good hitter with a defence that is improving with each practice. Fair field.

**Robinson.**—Slow break bowler who will one day surprise himself with the bag he makes. Bats well at the nets but pokes about too much in matches.

**Cowperthwaite.**—Medium pace, right hand bowler, length gets a bit ragged and too many leg balls. As a bat would score many more runs if he would get over the ball and not hit it just out of his reach. Must not go forward to balls out of reach.

**MacGregor.**—A promising bat with good strokes all round the wicket. A good field when he tries, but does not try with every ball that comes his way. Remember it is better to catch out the best bat on the other side and stop thirty fours, than let him make 50, and let the thirty singles become thirty fours. If you do this you should be prepared to make up that hundred odd runs yourself.

**Evans.**—Has some very nice shots on the off, and a square cut that many a senior player might envy. Practice will make the timing perfect.

**De Suza.**—Is not keeping up the promise he showed at first. A leg ball is a gift of four to even a poor bat, so don't give him the opportunity, but do accept all he gives you.

**X.**—An unknown, splendid medium left hander, fine slip and good hitter.

**Y.**—Also unknown, wicket keep who always accepts catches, stands up to the wickets for returns from the field and handles leg balls like Oldfield.

If X and Y will apply to the science tales they will be analysed and put into production on a successful basis.

### SECOND ELEVEN (Senior A. Saturday Morning)

Team in first term: E. Flyger (captain), Gregory, Rund, Carr, Dallimore, Coyle, Brobery, Lewis, Wakefield, Horner, Jamleson.

We were fortunate to have several players left from last season, which served to give confidence when we were placed in a bad

position. Our opening batsmen, Flyger and Gregory, put on several good scores, the partnership realising 92 against Mount Albert A. before it was broken. The best bowling was done by Carr and Coyle.

Matches first term:—

Versus Auckland Grammar; A.G.S. 91 and 133; S.M.T.C. 80 and 95 for five wickets.

Versus Mount Albert Grammar B.; M.A.G.S. 233; S.M.T.C. 58 and follow-on, 146 for 5 wickets.

Versus Mount Albert Grammar A. (one-day match); S.M.T.C. 130 for 6 wickets; M.A.G.S. 80 for 6 wickets.

Versus Pukekohe Technical; P.T.H.S. 53 and 50; S.M.T.C. 95 (1st innings).

Unfortunately, defections from the 7th XI. take tool of the 1st XI. players, so that in the third term our team is much weakened through promotions to the 1st XI. and through two defections from our own ranks.

### THIRD ELEVEN

This team has been a sort of Cinderella among the Saturday elevens—sure of seven or eight players, but on the hunt every week for four or five to make up a team.

The Second Eleven have been remarkably generous—"You can have X, Y, and Z. They're not a bit of use in the Seconds—can't bat or bowl for nuts!"

In despair we turn to the Fourths, only to hear, "Oh, of course you can't have B he's our captain!" or "To give you C or D would spoil our team entirely." "What about swopping them for X or Y, they played for the Seconds once?" "Nothing doing. Try the Fifths—they may have one or two they don't want." In despair we send out an S.O.S. last period on Friday and manage to field a redoubtable team to play in the Junior A. Competition.

However, we have always thoroughly enjoyed our matches and are grateful to those who filled the gaps at the last minute. We have managed to win as many points as we have lost. Our record for the season 1930-31 is:—

Auckland Grammar—drew: S.M.T.C. first innings 49; A.G.S. 49 and 51 for seven.

Sacred Heart—lost: S.M.T.C. 21 and 61; S.H.C. 42 and 24 for one.

Kowhai—won: S.M.T.C. 56 and 42 for seven; Kowhai 26 and 71.

Mount Albert Grammar B.—won: S.M.T.C. 40 and 46 for five (declared); M.A.G.S. 31 and 48.

Takapuna Grammar—lost: S.M.T.C. 27 and 44; Takapuna 136.

Auckland Grammar A.—Lost: S.M.T.C. 40 and 122 for seven (Wekfield 36); A.G.S. 125 for five.

Sacred Heart—won: S.M.T.C. 75; S.H.C. 51 and 43 for seven.

Mount Albert Grammar A.—lost: S.M.T.C. 61 and 44 for three; M.A.G.S. 112 for six (declared).

### FOURTH ELEVEN

A full account of our games has appeared in an earlier issue of the "Seddonian."

A noticeable feature of the lower grade cricket between the secondary schools is the fine sporting spirit in which the games are played. We are at present fairly well up in the grade, but more important than this is the pleasure we have had, that only cricketers know, of some keen well-fought matches.

The team: Jones (captain), McCook, Magill, Clark, Dewar, Graham, Waretini, McGregor, Rogers, Harris, Matthew, Kneebone.

### FIFTH ELEVEN

Although the 5th XI. gained few match points during the season, it has good cause to be satisfied with its progress. The team consisted entirely of first year boys who were given the opportunity of playing in a high grade in order to gain experience against strong opponents. It is hoped that, as members of a higher team in the school, these boys will turn to good account what they have learned.

As indicating the progress made in batting, the first innings of the 1931 season produced 39 runs while the last one resulted in the respectable total of 121 runs. Thus, there is no doubt that, had the season but continued a little longer, the 5th XI. would have produced a total worthy of a Test team. Incidentally, the final match against a team which had not been beaten, ended in a draw which was decidedly in favour of the Technical College XI. No doubt the coming season will see the "stars" of the team replacing those in higher grades who have left. We will be sorry to lose them, but at the same time, we will be glad to see them upholding the honour of the School in a higher team.

### DICKENS' FELLOWSHIP

A party of members of the Dickens Fellowship gave an entertaining programme at the Technical College on November 31st. Fully 600 pupils were present in the assembly hall. Proceedings were directed by the president of the local branch, Mrs. Kenneth Gordon, and the Rev. A. B. Chappell talked on the theme, "Among Dickens' Books." Other contributors to the programme were Misses Stratham and A. Kealy, and Messrs. C. Kidson, W. E. Arey and J. E. Green, the books mainly drawn on being "Pickwick Papers," "Nicholas Nickleby," "Oliver Twist," "David Copperfield," "Great Expectations" and "Mrs. Lirriper's Lodgings." The financial proceeds were divided between the college sports fund and the cost of a Dickens cot in the children's ward of the Auckland Hospital.

Hector Bolitho, an old boy of the College, and producer-manager of the first "Seddonian" has been living at Windsor Castle for the past five years. He has collaborated with the Dean of Windsor in three recent books and is engaged in writing the life of Prince Albert, husband of Queen Victoria. This work has necessitated the use of much material obtainable only at the Royal palace, and he has consequently enjoyed privileges which few civilians have experienced. A recent novel, "The Flame of Ethirdova" is published by the well-known New York house of Appletons. The following statement of the New York Times in reference to "Ethirdova," shows the quality of Hector Bolitho's work. "Perhaps in the entire range of English literature such narrative prose has not been accomplished above 20 times."

## MARINE ENGINEERING.

In recent years there has been such an advance in Marine Engines and their auxiliaries, that apprentices training for Engineering require to give considerable attention to keeping in touch with all modern developments. The apprentice must live a full life, in that he has his ordinary work at the trade, he must study the theoretical subjects in the evening classes, and must keep in touch with the latest types of engine.

It is sometimes thought that Engineering firms do not give sufficient encouragement to evening class work. In this connection the Select Committee—set up by the British Government to report upon education for the engineering industry—gave it as its opinions that employers should do more to encourage apprentices to attend technical schools. This Committee was a very influential one, presided over by Sir Dugald Clarke, and included Directors and Managers of some of the leading Engineering firms in the United Kingdom; Managers of public Engineering firms such as Railways, Tramways, Electric Light Companies; Professors, and Instructors in Engineering subjects in the Universities and Technical Colleges, and Presidents of the Institutions of Mechanical and other Engineering Associations, together with Secretaries and Presidents of Engineering Unions.

The Committee presented its report in July, 1930, and it recommended that methods of encouraging attendance at evening classes should be adopted by the payment of fees, the award of prizes, the consideration of school records in promoting boys, and permitting apprentices to leave work early so that early sessions of evening schools should be attended. The Committee specially recommended the last method of encouraging attendance at evening school; and in view of the fact that so representative a Committee as this set up by the British Government was anxious to improve the attendance of apprentices at evening schools, it might perhaps be of service as an example to New Zealand Engineering firms.

The Marine Engineering classes of the College have been kept closely informed as to the development in Marine Engines, through the kindness of the Manager of the New Zealand Shipping Company. Through his courtesy, numerous visits to the more up-to-date vessels visiting Auckland have been made possible, and many of these vessels have been of very great value to the classes. The "Rangitiki" and the "Tamaroa," are two of the vessels which have been of great interest to our pupils, and the boys have found this up-to-date method of instruction very interesting and very pleasant. To the Shaw Savill Shipping Company also, we have been indebted for the opportunity of visiting vessels of that Company. In this way, ships calling at Auckland replace in some way the Marine Engineering laboratory, which should form part of our Engineering equipment and which in a more prosperous age will, no doubt, be gone on with.

It may be of interest to the Marine Engineering boys to know that the Principal of the College has already been in communication with several of the larger English firms with the object of obtaining quotations for Diesel Oil Engine Plants, which could drive generating machinery similar to that which might have to be kept in order, on one of the large steamships.

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