BOYS OWN PAPER: INDIA

V1. No.4. August 1935

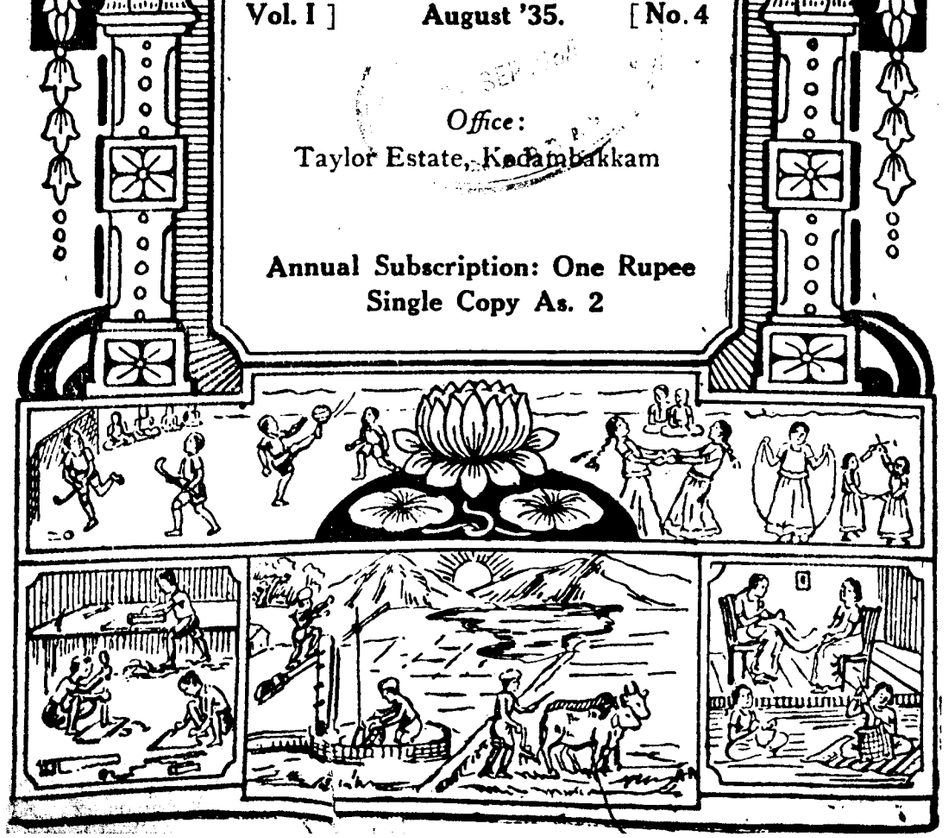
Verified

BOY'S OWN PAPER
INDIA

Vol. I] August '35. [No. 4

Office:
Taylor Estate, Kodambakkam

Annual Subscription: One Rupee
Single Copy As. 2



THE BOY'S OWN PAPER
(INDIA)

Vol. I | AUGUST 1935 | No. 4

MY PRAYER

" This is my prayer to thee, My lord—

Strike, strike at the root of penury in my heart,

Give me the strength lightly to bear my joys and sorrows.

Give me the strength to make my love fruitful in service.

Give me the strength never to disown the poor or bend my knees before insolent might.

Give me the strength to raise my mind high above daily trifles.

And give me the strength to surrender my strength to thy will with love."

—[*Rabindranath Tagore-The Gitanjali.*]

LITERATURE

Great English Poems.

REV. R. S. MACNICOL,
Madras Christian College.

Gray's 'Elegy'

Just about two hundred years ago, a young man of eighteen was studying in Cambridge University. He was rather solitary, but he had a friend in London to whom he used to write long, amusing letters. Once he described his room to his friend, and said that it was so enormous that when he got up from bed in the morning, it took him until mid-day to reach the table in the centre of the room! And then if he moved on, he found as he says:

"By the time that I arrive at the door it is so dark and late that I am obliged to turn back again. So about midnight I get to the bedside".

On another occasion, writing to his friend, he pretended that he heard the books in his library talking to each other, the Latin books making jokes in Latin, and the French books shouting in French.

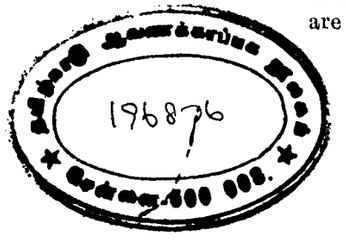
This young man, whose name was Thomas Gray, used to go and spend his summer days in a village in the country to the west of London, not very far from Windsor Castle where the King to-day often stays. The name of this village was Stoke Poges. Here he passed much of his leisure time; here his mother died; here he himself was buried and we can visit the churchyard and see his tombstone.

That churchyard will for all time remind us of Gray, for it was in it, as a young man of twenty-six, he began writing his beautiful '*Elegy*.'

The curfew tolls the knell of parting day,
The lowing herd wind slowly o'er the lea,
The plowman homeward plods his weary way.
And leaves the world to darkness and to me.

Now fades the glimmering landscape on the sight,
And all the air a solemn stillness holds,
Save where the beetle wheels his droning flight,
And drowsy tinklings lull the distant folds;
Save that from yonder ivy-mantled tow'r
The moping owl does to the moon complain
Of such, as wand'ring near her secret bow'r
Molest her ancient solitary reign.

Do you not feel the quiet sadness of these opening lines? When a poet writes an 'elegy' he is usually writing in memory of some friend he has lost; but Gray's *Elegy* is something different. The poet is quietly dreaming of the way in which time passes unnoticed: life begins, moves and ends, and the most important things to man are not fame and fortune.



Gray took a long time to write the poem. He did not work like John Keats scribbling hasty, shining lines on scraps of paper. We know that about eight years passed during which the *Elegy* lay incomplete. Sometimes Gray would take it up and find some lines which dissatisfied him: he would then cross them out and try again. Sometimes he would cancel a whole stanza. So you can see how slowly he worked, and how thorough he was.

At last he wrote to his friend, in 1750. "I have been here at Stoke a few days (where I shall continue a good part of the summer); and having put an end to a thing whose beginning you have seen long ago, I immediately send it to you."

This 'thing' which he sends to his friend is the famous '*Elegy*' finished at last, and if we go to England we can see it as it was written in Gray's own handwriting, with some of the words altered and crossed out, just as he worked at it and wrote it long ago.

You must all read it. Some of its lines are well-known and other writers quote them.

The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave,
Awaits alike the inevitable hour.
The paths of glory lead but to the grave.

Perhaps you think that this is a melancholy thought, in spite of its solemn music. But this is not all; and to enjoy the poet's fancy, or to understand his quiet thoughts you must turn up your poetry book and read the *Elegy* to the end.

(Next month: The story of "Paradise Lost.")

GOD SENDS LOVE TO YOU

Above the edge of dark appear the lances of the sun;
Along the mountain ridges clear his rosy heralds run;
The vapours down the valley go,
Like broken armies, dark and low.
Look up, my heart, from every hill,
In folds of rose and daffodil,
The sunrise banners flow.

Oh, fly away on silent wing, ye boding owls of night!
Oh, welcome, little birds that sing the coming-in of light!
For new, and new, and ever new,
The golden bud within the blue;
And every morning seems to say;
"There's something happy on the way,
And God sends love to you!"

HISTORY

The Story of Egypt

By T. K. Venkataraman, M.A.,L.T.
Pachaiappa's College, Madras.

We found that Man developed in culture, as ages went on. We find also that, as a result of the influence of environmental conditions, differences developed amongst the men who inhabited different areas of the world. There grew up three main divisions of the human race (1) Negroid (principally living in Africa, but found also in some other areas), (2) Mongoloid (living chiefly in Eastern Asia, but found also scattered in some other areas and (3) Caucasian (found in Europe and Western Asia).

Civilisation advanced still further in the areas inhabited by some of these races. In this article, we shall confine ourselves to one of these areas—Egypt.

As you all must have known, Egypt occupies a favourable position in North Africa. The country was protected from enemies by the sea on one side, and the desert on the other. So, the men living here, freed from anxiety, could turn to the arts of peace. At the same time, the land is watered by the river Nile and made highly fertile. No wonder, therefore, that the people here were able to advance towards a higher and more comfortable existence.

From early times, there grew up a firm government here directed by illustrious dynasties generally called by the title of "Pharoahs". Some of these early Kings built huge stone edifices erected in a pyramidal form, and, hence, called the Pyramids, which form, still, stupendous marvels attracting visitors. The Egyptians believed that, even after death, a man's soul lived in a land beyond the grave, and, unless they preserved the dead body from decay, this soul would also die in agony. Hence, there was developed a perfect process of embalming the corpses so that they were kept in complete preservation. Such embalmed bodies are called mummies. In the Pyramids, we see even to-day the mummified bodies of the dead Kings contained in huge stone boxes. These tombs contained everything which, it was believed, the soul would need in the other world, and these objects of daily life, as well as luxury, reveal to us the highly developed culture of those ancient Egyptians.

Every variety of agriculture was practised. Considerable advance was made in the making of lovely pottery, weaving, making of furniture, and metal work. Even glass-blowing was known. The Egyptians were also great traders, and their ships were to be found in the Eastern Mediterranean and the Red Sea. Large and noble

cities were developed which contained massive temples to house the numerous Egyptian gods. The Egyptian buildings were decorated with sculptures and painting of a very high order.

Attention was also given to intellectual advancement. A way of writing was developed and we have long rolls of papyrus (a kind of writing material made from reed) filled with "hieroglyphics," as the Egyptian letters are called. The Egyptians, also, were the first people to devise a calendar. Though there was general superstition, some of the Egyptian thinkers even reached to the conception of a supreme God.

The Egyptians also developed a fine administrative system. They had a definite system of law, and courts to administer this law. There was a well-organised irrigation machinery. The financial system of the land was remarkably efficient. There was even a professional army to help in the defence of the country or to carry on wars. Many of the kings carried on brilliant wars, and one of them called Thutmose III erected the first extensive empire in the world, and made his country very wealthy by his conquests.

Roughly, about 5000 B.C., the Egyptian people had emerged from barbarism and advanced on the path of civilisation. But, from about 1400 B.C., their history is that of decline. The Egyptians, like many ancient peoples, depended on slave labour, and, hence, grew soft and effeminate. The kings grew weak and were unable to check their officials who became corrupt and oppressive. There had developed also in Egypt a swarm of priests who were rich and highly-privileged and who made Religion serve their own selfish purposes. Under these conditions, the Egyptians lost their vitality and soon fell a prey to sturdier foreign conquerors.

HEALTH AND HYGIENE.

A HEALTH-GIVING FOOD.

Many people do not get sufficient Vitamin B in their food and, consequently, lack energy.

If there is a serious deficiency of this Vitamin in the diet, a disease known as 'Beri Beri' and certain kinds of paralysis may result. People whose diet largely consists of polished rice, instead of the good hand-milled rice with brown bits of the outside left on, are particularly liable to contract this disease.

In many schools in the north of India, the J. R. C. Groups provide a lunch of sprouting grain for all the pupils and this is how to prepare it:

Take an earthenware dish and put into it a small handful of gram or country peas, or any grain you like, one handful for each person. Cover with water and let it stand for three days, by which time the seed will be found to be sprouting. Wash it in clear water and eat it with some salt or curds.

Three chatties should be kept in use, so that a supply may be obtained daily.

Try this and you will find a remarkable improvement in your health.

The Madras Junior Red Cross.

JUNIORS AT THE GOVERNMENT HIGH SCHOOL, BULDANA (C. P. AND BERAR) EATING A LUNCH OF SPROUTING GRAM.

(By the Kind courtesy of The Indian Red Cross Society.)

FINE ARTS.

How to write down the Songs You Sing.

REV. R. S. MACNICOL,

Madras Christian College.

Last month we kept a note-book for practising the SA: RI: GA: notation of the singers of India. Have you been writing down any tunes? Can you sing this one, and guess what it is? Here is the first line.

SA—SA—RI—NI,— —SA, RI—

Every one of you who has a note-book with the steps marked in it, should easily recognise that when you sing it.

Now this week we shall learn how to write in the way they print Western Music. Some of the most elaborate and complicated pieces of music have been set down on paper by means of this writing or notation; but we must start off with simple things.

Western Music is all written on a sort of frame like this:

Fig 1.

And when you see the music, it looks like a row of monkeys on a fence. Suppose we draw them like this.

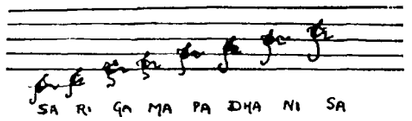


Fig 2.

Then the monkeys are sitting just like the steps we studied last week. You cannot hear them talking, but I want you to imagine that the lowest monkey, on the left, is sitting on the ground, singing SA, and the one next to him RI, the next one GA, and so on. So monkey number eight, on the right, high up on the fence, is singing in a shrill voice a high SA, eight notes higher than the first one.

Now we shall just draw the frame again and put in *notes* (as they are called) instead of monkeys: underneath we will write the sounds you have learned already.

FIG. 3.

Can you sing that?

Have you noticed one thing,—that some of the notes are on the lines of the frame, and some are on the spaces? SA, GA, PA, NI, are all sitting on lines, while RI, MA, DHA, are in the spaces between the lines. Be careful to put them in the right places, otherwise your tunes will go wrong.

II.

Now these lines and spaces have to be labelled so that there may be no confusion. So a very simple thing is done. Each line and space is given a letter of the alphabet, like this.

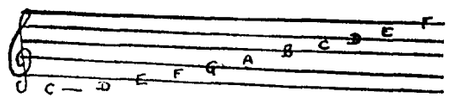


Fig 4.

So when the SA monkey sits on the ground below the fence, we may really call him C, when we sing his note. And the monkey next him is D; and the next one E. So we get a whole row of monkeys like this.

SA RI GA MA PA DHA NI SA.

C D E F G A B C.

Some one is asking, why don't you begin with ABC, and so on. Well that is a big question and it need not trouble us here. The main thing is to remember that our SA note corresponds here to C, and there must be only six notes between the low SA (or C) and the high SA (or C).

Is that puzzling? Then let us write down the tune with which we started to-day; and let us write it in the new way.

C—C—D—B— —CD.

Can you sing that? Well then, let us write these notes as if they were monkeys on a fence. This is what we find.

Fig. 5.

We have covered a good deal of ground to-day. Next time we must study the question of the number of monkeys to each fence. This is a great secret. Have your note-books ready.

DRAMA

BLESSED IN A WIFE *

By V. V. Srinivasa Aiyangar,
Ex-Judge, Madras High Court.

Act I. **Scene I.**

A Drawing room in a Suburban Villa in Madras.

TIME—FORENOON.

[The scene opens with Doctor Naidu standing bag and stethoscope in hand with a concerned and serious air. He is in the midst of a conversation with Lalita].

Dr. Naidu.

Improvement?—Well—No not yet.

Lalita.

You hoped there would be—to-day.

Dr. Naidu.

I did—we always do.

Lalita.

I imagined it was something more special.

Dr. Naidu.

Oh! yes, I beg your pardon, it was. I thought the swelling would go down. His head is not so much touched. But I don't like his heart.

Lalita.

I never did, for that matter. However, is he much worse? Do you think his condition is precarious? You understand what I mean!

Dr. Naidu.

Look here Lalita—If I did not regard you as my own daughter—Well—you are a sensible girl. There is no use disguising the fact he is still in a critical condition.

Lalita.

I have known it, all these three days. I am prepared for everything. Tell me the worst.

Dr. Naidu.

No, not by any means. I hope to pull him through yet—I have prescribed a new specific. I shall call again this afternoon. Meanwhile don't lose heart.

Lalita.

I can't. And it would not matter if I did. I do nothing but sit and look at that room all day. Doctor, why don't you let me go in?

Dr. Naidu.

Because I expect to save him. He has some occasional glimpses of consciousness and then he asks for the other woman. Let me assure you, you won't like it either.

Lalita.

I will. You know me not—as I am. I have steeled my heart. I have suffered. I have passed through fire. I am not the same Lalita your daughter used to play with. Why did she go—why did I not?

Dr. Naidu.

Perhaps she was fortunate. Who knows she would not have been miserable like you? Imagine your parents being alive to-day to see you suffering thus!

Lalita.

Are you not as a father to me? Don't you suffer? Were you looking on merely as a doctor, when the other day you went to that woman's house to bring him—saw him laid all unconscious there—like a corpse—and you wept. They told me all.

* Reprint from "Dramatic Divertissements" with the kind permission of the author.

Dr. Naidu.

It is getting late. I must be going. I shall be here exactly at four.

Lalita.

Doctor—May I ask you a favour? Will you be good to me?

Dr. Naidu.

Do child—I cannot refuse you anything—anything reasonable I mean.

Lalita.

God knows whether he is going to live or die—the man whom—well—my husband—and if he should live whether he won't go back to that woman. It has been troubling my mind horribly. What have I to live for? I was wedded to him—though against his wish and when I was a baby. But we are none the less husband and wife in the eye of God and man. Why should I not watch at his bed-side and be of some little use perhaps in his last day of this life? No, you shake your head. I will not weep, or talk, or disturb him in the least. He will not even know me.

Dr. Naidu.

How can you manage that?

Lalita.

I didn't mean any managing. He hated me always. He never looked at me. He knows me not. But now that you suggest it, I would disguise myself like one of your nurses. Call me—Fortune and I shall move noiselessly and do everything mechanically just as the nurses do.

Dr. Naidu.

You are a girl! It is a good idea—but not for carrying out—I shall see you this evening.

Lalita.

Please—dear Doctor—don't go away like that—shall it be so say yes—won't you?

Dr. Naidu.

I shall think about it.

Lalita.

Think?—When life seems not worth an hour's purchase.

Dr. Naidu.

You ought not to be hasty, Lalita. I shall consider what you have asked and if I think it would be harmless, I shall let you. Be patient till the evening. But you must wear spectacles of smoke-glass if I should let you. Then he won't suspect perhaps—Your eyes are tell-tale.

Lalita.

I shall do anything.

Dr. Naidu.

Well—I shall give it my best thought. Look! there is your mother in-law groping this way. I need not take the trouble to return this evening if she should catch me now. I shall be off.

Lalita.

Doctor, I shall hold my soul in patience till evening. But, remember, I will take no refusal. I am resolved.

Dr. Naidu.

Dear Lalita—What can you mean? you speak threateningly.

Lalita.

What has a poor—wretched—helpless—orphan girl—who was never known her husband — or happiness — to threaten about?

Dr. Naidu.

But you do, dear child.

Lalita.

No, it is not that. Why should I not tell you? I had a dream early this morning. It was so real. I feel I can save him—from death—from worse than death—perhaps. Why won't you give me a chance?

Dr. Naidu.

I shall—think about it. I shall be off now.

[*Enter Parvathi stick in hand feeling her way.*]

Parvathi.

Is that you, Doctor? Why are you running away? Is it because I am coming over to speak to you?

[**Exit Lalita.**]

Dr. Naidu.

No, Indeed, I am not. I have promised to see the Zamindar from Salem before eleven.

Parvathi.

My precious daughter-in-law seems to have been talking to you for three hours. I have no doubt she was anxious to ascertain when she will get all the property into her hands.

Dr. Naidu.

I don't understand you, Madam.

Parvathi.

Of course, how can you? I am such a fool. I cannot even read or write. How can you understand me? You understand clearly all that my daughter-in-law says—don't you?

Dr. Naidu.

I do sometimes.

Parvathi.

You never can understand me, you never want to.

Dr. Naidu.

How can you say such a thing?

Parvathi.

It seems so strange to you that anyone should speak the truth.

Dr. Naidu.

I have not known you only yesterday, Madam.

Parvathi.

Of course, what does that matter?—I am old now, ugly and blind and I am poor. Who cares for me?

Dr. Naidu.

If no one else does, God will.

Parvathi.

Oh! yes. I know how you people all feel about me. You are praying I might die and I don't and I won't. I am such a nuisance—such an obstacle and when my son dies I shall be more so than ever.

Dr. Naidu.

But why are you always speaking of the death of your son? Would you do so if he were your own son and not merely adopted?

Parvathi.

God knows I love him more than all others.

Dr. Naidu.

I am so sorry for all others.

Parvathi.

But what about me? Why won't you be sorry for me? What is to become of me if my son should die?

Dr. Naidu.

No, you need not be anxious he is dying. He is going to live.

Parvathi.

I don't believe a word of it. Nor do you, I know. He is dying. I can see it. What else can happen with such a daughter-in-law in this house?

Dr. Naidu.

But it was you that insisted on his marrying your cousin's daughter.

Parvathi.

How could I have known then that her parents were going to bring her up as such an impudent unmannerly girl?

Dr. Naidu.

You might have taught her better after she came to live here.

Parvathi.

Teach her indeed! To be shown the way out of this house!

Dr. Naidu.

I hope somebody will show me out — It is getting late for me. Madam, we shall, if possible, continue this interesting conversation some other time—I have a very urgent call to make.

Parvathi.

Don't go away Doctor. Only one word. Please—please—bear with an old woman with one foot in the grave. Don't you think it is necessary that while my son is alive, I, mean before anything happens, some arrangement should be made so as to avoid all dispute about property?

Dr. Naidu.

What arrangement could be made now? He is unconscious. We can't think of it until he gets better.

Parvathi.

I hear that many people write their wills when they are unconscious.

Dr. Naidu.

I suppose your sister's son told you so when you went to see him last Sunday, Of course, he is a lawyer and is better acquainted with all those things.

Parvathi.

How could I have gone to see my sister's son or anybody else when my son has been in this condition?

Dr. Naidu.

How indeed!—I can tell you if you care, Madam. But it is getting late for me.

Parvathi.

Then, is there no way? Can he not write a will even if you should attest it Doctor?

Dr. Naidu.

No, impossible.

Parvathi.

Then who is to have all the property?

Dr. Naidu.

His heir.

Parvathi.

He has no heir—no son or daughter. Why should I weep if he had? His wife's brothers are sure to come and take it all away.

Dr. Naidu.

His wife is not a fool,

Parvathi.

Of course not. Don't I know? But it is one thing to be clever with a mother-in-law and another with one's own brothers.

Dr. Naidu.

What should it matter to you if they do? You have enough to live on decently.

Parvathi.

I won't live to see my husband's property taken away by strangers.

Dr. Naidu.

You need not trouble—and then your daughter-in-law is no stranger.

Parvathi.

But I am my husband's heir after my son.

Dr. Naidu.

Well—if you are, you will get it. Now let me go.

Parvathi,

Oh! you think so and there won't be any trouble?

Dr. Naidu.

Not that I should mind.

Parvathi.

Oh! I feel so relieved. I thought so. You are a clever doctor. I know you will somehow pull through my son.

Dr. Naidu.

However, with your—blessing—and good wishes Madam—

[**Exit.**]

(To be continued.)

POWER

FLYING.

E. N. V. Everett, R.A.F.O.
Chief Pilot Instructor, Madras. F. C.

Man has always been interested in flying; whenever our forefathers saw the birds swiftly winging their way across the sky, they often wondered how it was done. Various experiments were made from time to time but it was not till the advent of the petrol engine that flying came within the bounds of human ingenuity.

Aviation, both as a career and as a hobby, is intensely interesting and as the world progresses, so will interest in flying increase; because in flying we have man's fastest means of transport, and without a doubt in the near future it will be the only means of getting from place to place by man over any reasonable distance.

Now before we start studying this very interesting subject, we must understand the theory of flight and the various forces that act on an aeroplane in the air. So this, the first of three articles, will be entirely devoted to the theory of flight, the definitions of various terms, and of the forces acting on an aeroplane.

There are four forces acting on an aeroplane:—

1. Lift.
2. Drag.
3. Thrust.
4. Gravity.

1. *Lift* is the force which tends to make the aeroplane fly up or lift; this is caused by the forward motion of the aeroplane. I say aeroplane here rather loosely, as actually the lift is got off the aeroplane's wings.

How do we get this lift? This lift is obtained by inclining the wings at an angle to the air. Many of you who have flown kites, may remember how when the kite is placed at a slight angle upwards it flies up when the string is pulled, but when it is horizontal it slides along parallel to the ground, or if it is held at a slight angle towards the earth and the string is pulled, it immediately flies into the ground, and so you spoil a perfectly good kite. Again if you fling a card through the air and it meets the air at the correct angle, it flies up, if not it flies level or dives towards the earth. So now we see that lift is obtained by either pulling or pushing any surface through the air that is inclined upwards from the horizontal. This angle is called "The Angle of Attack" or "Angle of Incidence." It is called the angle of attack simply because it attacks or meets the air at this angle.

2. *Drag* is the force that acts in the reverse direction to the direction of motion; if you hung on your friend's coat when he was walking, so that he would have to pull you along, you would then be exerting a drag on him.

What causes this drag? The causes of drag are many, but the chief is bad design. The air, to anybody moving

through it at speed, is a fluid like water, though it is a gas, we call air. Have you ever seen the currents and whirlpools on the down stream side of a stone in a stream? Well, exactly the same thing happens when we push a surface thro' the air. In front the air is smooth, but immediately behind it is broken up into little pockets of vacuum, which exert a drag. Have you ever noticed that dust and pieces of paper actually follow the car though it is moving about forty miles per hour? This is due to the bubbling of air, as it is called, immediately behind it. It is more noticeable behind saloon cars; these pockets of air of partial vacuum exert a drag on the forward motion.

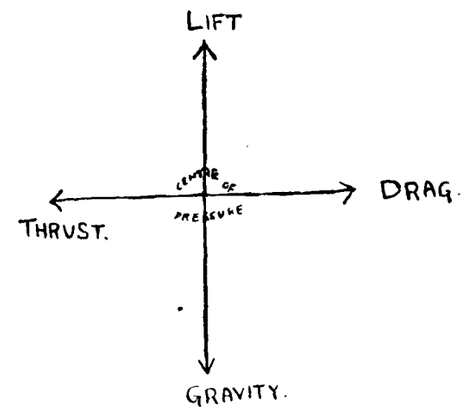
This drag would be a very serious thing in an aeroplane, so it is overcome by "Stream-lining." The perfect stream-line shape is like a fish, as this shape allows the air to flow smoothly over the whole surface, with the minimum amount of bubbling at the rear; see how easily a fish moves through the water, he would not move so easily if he was not streamlined. So all parts of an aeroplane that come in contact with the air flow are streamlined to cut down this drag as much as possible.

3. *Thrust* is the force that moves us (either by pulling or pushing) through the air, that is, thrust is the forward motion of our aeroplane. This is obtained by the air-screw or propeller, which is turned by the engine. The propeller is so designed that when it turns it tends to fly off and forward, but it cannot fly off as it is attached to the engine which in turn is fixed to the aeroplane; so when the propeller turns and tends to move forward it drags the aeroplane behind.

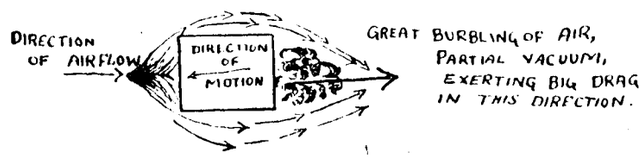
4. *Gravity* is the force of attraction exerted by the earth and it tends to pull everything back to the earth.

If we make a diagram of these forces we will find that they act in pairs contrary to each other through one point, as shown in the diagram.

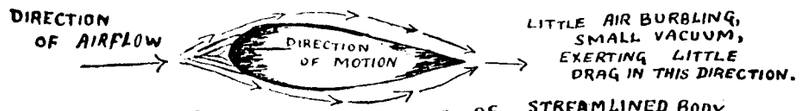
An ordinary flat surface does not give us the maximum lift for that surface area; simply because it is flat and depends entirely for its lift on air pressure on its lower surface, efficiency is lost because on its upper surface we would get bubbling of air which would exert a "Drag", and also this flat surface would not give us a reactionary lift at right angles to its motion, and that is what we require to help the aeroplane up. So the wing of an aeroplane is designed in an "Aerofoil section." An "Aerofoil" is a surface that gives the maximum lift for the forward motion of that surface, and the reaction of this lift is at right angles to the forward motion. Have you ever examined a bird's wing? If you have, you will have noticed that the forward edge of the wing is thick; it contains the bones and muscles of the wing and



UN-STREAMLINED BODY

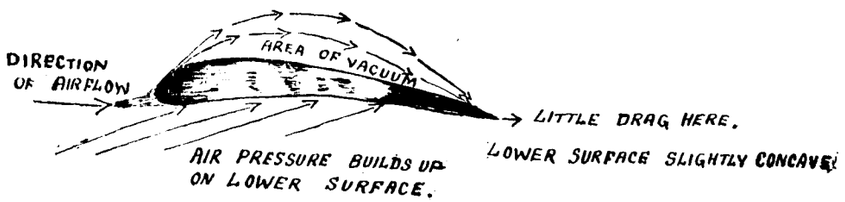


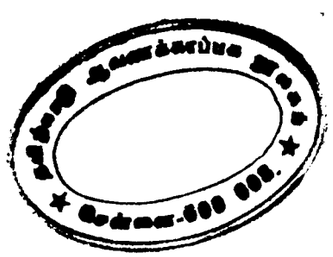
STREAMLINED BODY.

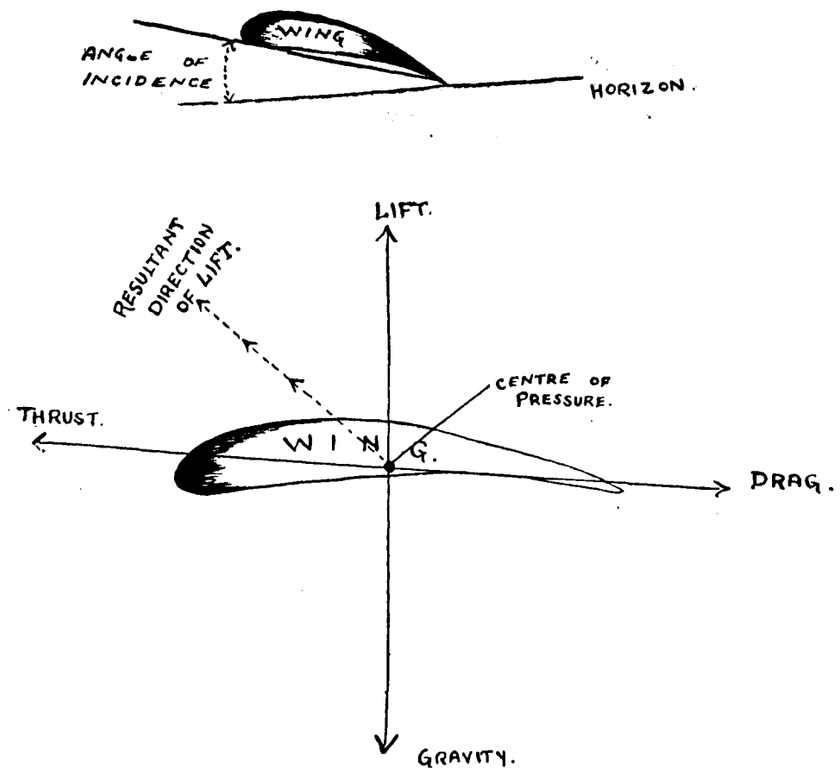


AIR FOLLOWS CONTOUR OF STREAMLINED BODY.

SECTION THROUGH WING OF "AEROFOIL SECTION.







is thickly covered with feathers, and the rear edge thin, in fact it is merely feather tips. This is an "Aerofoil Section". So an aeroplane wing is designed like this, thick in front, thin at the rear.

When an "aerofoil" is moved through the air, 70 per cent, of its "lift" is obtained from its top surface and only 30 per cent. on its bottom surface. The "Aerofoil Section" is so designed that when air flows past and over it, a vacuum forms on the top surface and the wing naturally tends to fly up into this vacuum. At the same time an air pressure is built up on the lower surface and this air pressure tends to push the aerofoil up into the vacuum, so the wing lifts up and away from the ground. This lift can only be obtained at certain minimum speeds, as the vacuum on the top surface and the air pressure on the bottom must be built up, and the thrust be of sufficient strength to overcome the drag. That is why an aeroplane must first run a short distance before it can "take off" from the ground.

Some Things to do in Your Leisure Hours.

KURUVILLA JACOB, M.A. (LEEDS)
Headmaster, Madras Christian College School.

A Problem

Two villagers who were travelling to a town stopped under a tree for their midday meal. One of them had five loaves with him and the other only three. When they were about to begin eating, a stranger came up and said that he had money but no food and asked whether he might share their meal. He promised to pay for what he ate. The two villagers agreed to divide the loaves equally among the three and they all sat down and had their meal.

When they had eaten all the loaves the stranger opened his purse and laid down eight one-anna pieces for the food he had eaten, said good-bye and went away. The villager who had five loaves took five annas as his share and left three annas for the other man who had only three loaves. But this man did not agree to the division and said that the eight annas should be divided equally between them.

The two men began to quarrel and as they could not agree they ran after the stranger who had given the money and requested him to divide the money fairly between the two. The stranger, after careful thought, said "Let the man who had five loaves take seven annas and the one who had three take only one. That will be a fair division of the amount." They were both greatly astonished. But the stranger was right.

[*See the next number for the explanation.*]

CHILD IN A GARDEN.

The tall blooming poppies ask me out to play,
Their silken skirts aflutter down the flowery garden way.
But I pretend I'm busy, for the poppies seem to me
Just like so many ladies in grown-up finery.
The red rambling roses clutch me as I go
Along the open garden where all the breezes blow;
But I don't play with roses, although I'm tall enough,
Because they have sharp fingers, and 'cos their play is rough!
The sweet yellow pansies call me, when I pass,
To come and play a minute behind the pampas grass;
But pansies are such babies, and play such silly things,
I'd rather ride the see-saw, or twist up daisy strings.
The phlox in the borders ask me out to play.
And O, I jump quickly and throw my books away,
For, tangled and untidy, all pink and white, the phlox
Are like a crowd of little girls in printed summer frocks!

—MYRA MORRIS.

(From *The Australasian.*)

News and Notes.

Plans for a building of 196 storeys, rising 2,000 feet in the air and providing on one site a complete city with a population of 250,000 people have been completed by Mr. Henry Rush, former architect to the city of St. Louis.

THE BUILDING WOULD BE MORE THAN TWICE AS HIGH AS THE EMPIRE STATE BUILDING IN NEW YORK. IT WOULD CONTAIN INDUSTRIAL AND COMMERCIAL FACILITIES, A RESIDENTIAL DISTRICT, A UNIVERSITY, A HOSPITAL, RAILWAY STATIONS, AN AIR TERMINAL AND AN OBSERVATORY.

Roads for street traffic would traverse the building and Mr. Rush suggests a site on the coast to enable it to be accessible for ocean-going vessels.

The plans provide for the city to have its own climate, there being air-conditioning plant for the entire structure.

In keeping with the magnificent interior designs, the exterior would be laid out on a big scale.

The building would be set in an immense plaza, planted with trees and flowers, and having fountains and music pavilions. The structure would be finished in white terra cotta, laid over reinforced concrete on a steel foundation. construction would employ 100,000 men for four years.

Mr. Rush believes that the building would be a magnet for tourists from all over the world, and would be so readily accessible that it would furnish means of making for control of world trade by "an international clearing-house."

The town of Oi-Mekon becomes famous. It has just been awarded the doubtful distinction of being the coldest town on earth.

Verkhoyansk, in Eastern Siberia, previously held the record. Its pride was the fact that it was the only place in the world where mercury froze.

But the Soviet Arctic Institute now switched the chill championship over to Oi-Mekon several hundred kilometres away from Verkhoyansk.

Here are some of the points that won the title for Oi-Mekon:—

Prevailing temperatures are lower than minus 102 degrees Fahrenheit.

Water thrown from a bucket freezes before hitting the ground.

Instead of splashing it breaks.

But the inhabitants are not seriously inconvenienced.

The air is extremely dry and the lack of wind enables them to go about in the ordinary winter clothing of Siberia.

Some of them who have travelled complain of the cold in Moscow which though warmer is considerably damper.

Iroquois Falls, Ontario, has been called the coldest spot on earth. Its temperature has been below 50 degrees below zero.

The lowest recorded temperature in Britain is minus 23 degrees—in Berwickshire in the frost of 1879.

A nice mild day in Oi-Mekon!

Athletics—How to be Successful.

R. P. JOSEPH, *Residential Secretary, Y.M.C.A., Madras.*

I. The Sprints.

(50 yards, 75 yards and 100 yards).

The sprint is a common event in any school sports. It is also a very important one, as it helps you in other events such as Long Jump, High Jump and Hurdles.

(a) Style.

You cannot be a good athlete unless you learn a good style. By style, I mean the way you use your limbs to get the best results with the least amount of effort. Styles in athletics vary with different individuals, as all bodies are not the same. A style which suits one person does not always suit another, but your style is the one from which you can get the best result with the least amount of effort. In short, your running should be easy.

To have a good style, you must do certain things. Otherwise, your style is bound to be faulty.

1. **Run straight.** Because, by running from side to side, you are running a greater distance than you need do. During practice, make your running-lane as narrow as possible and keep inside it. Later on, go to the football field and practice running down the touch line.

2. **Run on the toes.** Practise walking on toes, skipping and hopping, as all these actions strengthen the muscles you will use when sprinting.

3. **Keep the feet as near to the ground as possible.** Do not raise the knees too high, or kick up the heels behind.

4. **Lean your body forward,** as it will help you to increase your speed and to run on the toes.

5. **Use your head vigorously** traight out and back, like the piston of an engine. The arms should be bent and should never wander away from the body like a pair of wings.

6. **Incline your head forward in** a line with the body and keep it as still as possible. Never throw the head back, not even at the finish.

(Next month: The Sprints—The start and the finish).

Enjoying a Play.

DEAR MADAM,

I wish to tell you about the Red Cross play we rehearsed successfully, in order to celebrate Christmas. It was entitled "Hanging the Picture". We managed to get a real stretcher from our R. C. Depot, on which "Mr. Bevan" was carried by the help of "Finch" and the four stretcher-bearers."

The girls who played the parts were voted for, as we thought this was the finest thing to do, and the results met with approval from the girls.

For our play we needed many things, so we each brought something. We needed cushions, crockery, a first-aid box, some money, and different articles of clothing, also rugs and cushions to make a couch for Tom to be on when he was knocked unconscious.

We made a stage out of tables, and on the stage we needed a table, couch, a table for odds and ends to be put on, and as many things as we could get to make the scene as much like a room as possible. Each of the characters who needed a cup, plate and saucer, etc., brought her own, and one girl who lived near the school very kindly provided hot sausages, potatoes, and a pot of tea. The dress rehearsal was very jolly. We came to school loaded with parcels and cases, and how different some of us looked in our costumes. We enjoyed a hearty laugh when some of them appeared. When "Mr. Bevan" fell off the steps she did not laugh, although everybody else did, when she was supposed to have been hurt. She groaned and complained, although I am sure she felt more like laughing. "Mrs Bevan" wore her hair differently in order to make her look older. The two boys "Jack" and "George" (our first-aid girls) kept very calm, and suited their parts very well. "Tom", their younger brother, looked just like a boy in a suit with short trousers and socks. When she fainted she said that it was a great temptation to open the eyes and laugh; she did not, however, for she acted her part very cleverly.

"Section Leader Finch" looked exceedingly official in her buskins, green blazer, and knickers, etc. She curtly gave orders to her squad. The stretcher-bearers looked very smart in their navy blue blazers, black stockings, navy knickers, and berets. They obeyed every order smartly, and marched out with the stretcher.

The play, "Hanging the Picture," was amusing and instruuctive. The amusing part was Mr. Bevan's conceit, and the great amount of useless talking he did. The instructive part was when the two boys calmly managed the unexpected cases caused by the accidents. They fixed Mr. Bevan's collar-bone, they bathed Mrs. Bevan's scalded hand, they made the unconscious Tom comfortable, and when the doctor arrived he was surprised to see how well they had done their work. This play was very successful, and we hope that when we have another play it will prove just as interesting—Yours Sincerely, Members of the R. C. Link, St. James Girls' School.