

THE YOUNG CITIZEN

AN ILLUSTRATED MAGAZINE OF WORLD-BROTHERHOOD

Vol. 3

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No. 7



Youth Comes to Re-Shape the World

Edited by Annie Besant, D. L., and G. S. Arundale, M. A., LL. B.

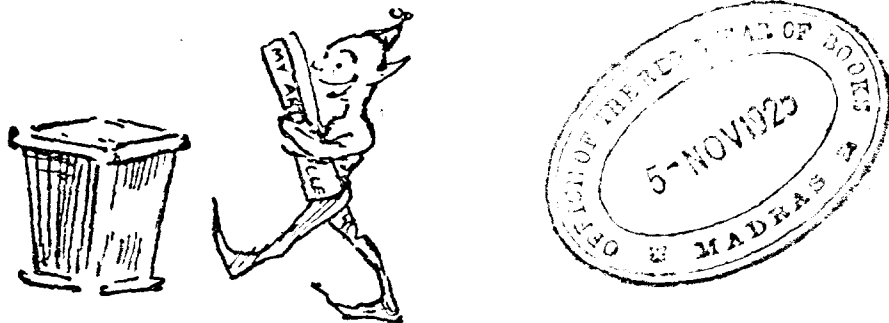
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ANNIE BESANT AND G. S. ARUNDALE, Editors

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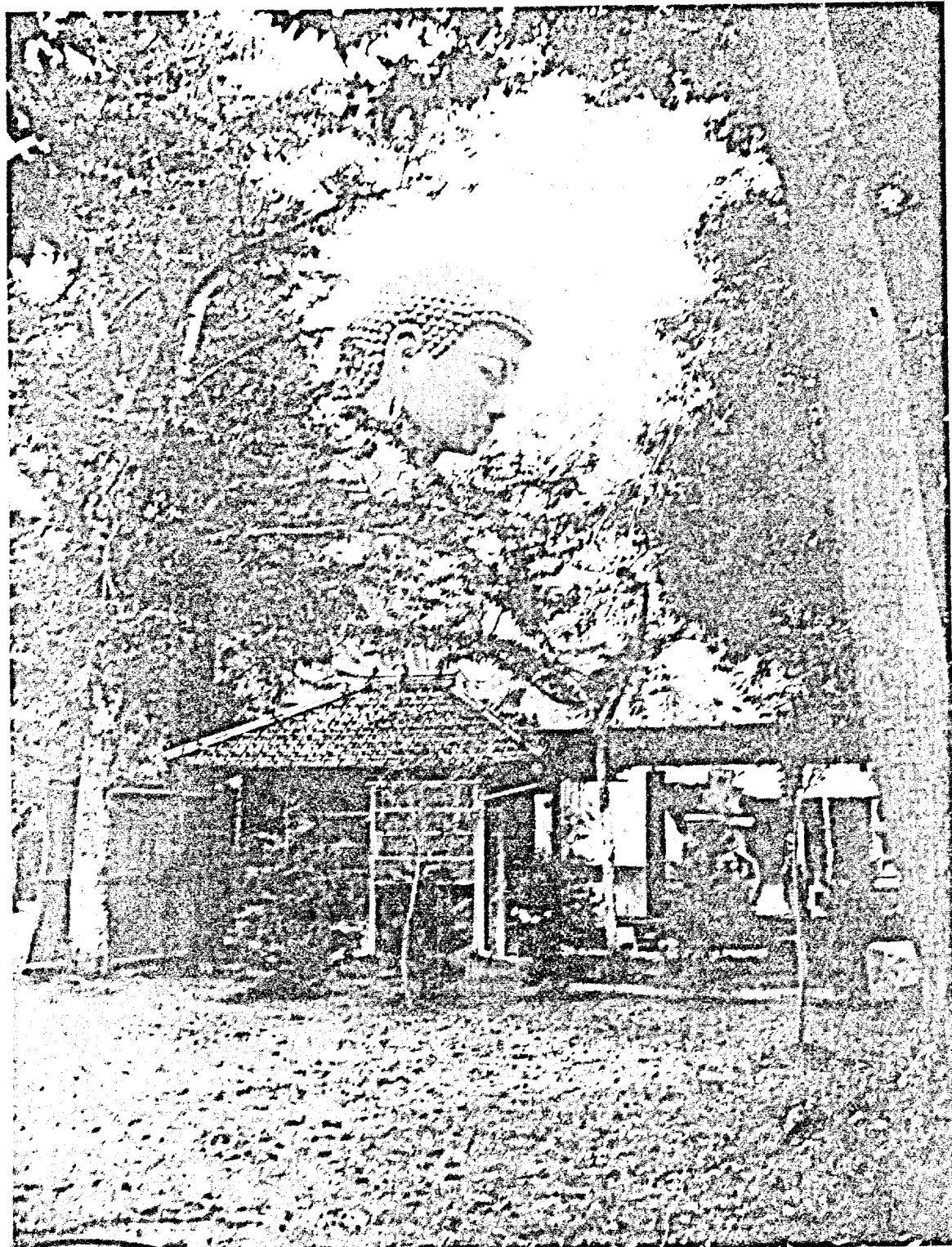
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In the November Number of

The Young Citizen

WILL APPEAR:

FROM THE FRONT
IN THE WORLD'S SERVICE



THE DIABUTSU, KAMAKURA
With Love and Devotion to
Dr. Annie Besant
FROM A WAYFARER
JAPANESE POEM

o no nake wo
Nani ni talayemu?
Asa-barake
Kogi-Juku fune no
Ato no shira-nami.

To what shall I compare
This World?
To the white wake behind
A ship that has rowed away
At dawn.

The Young Citizen

AN ILLUSTRATED MAGAZINE OF WORLD-BROTHERHOOD

VOL. 3

MADRAS, 1st OCTOBER, 1925

No. 7

From The Front

BY A LOCUM TENENS

OCTOBER 1st, the day on which this issue is published, is the anniversary of the Birthday of Dr. Annie Besant, our Chief Editor, and we cannot resist the temptation, during her convenient absence from the Editorial Table, to recall, even in her own paper, some of the lessons that her work and methods afford to young citizens. On this day, from all over the world, wherever there are people who have come in contact with her ideals and teachings in Religion, Politics and Social Science and have attained peace of mind through the inspiration that has come to them through her work, or wherever India's name is known and remembered, a powerful wave of loving and grateful thoughts will go to her wherever she may be at the time. We do not propose to refer here to any particular branch of her activity: we would fain leave that to our elders.

But Dr. Besant's life has been so eloquent with lessons for young aspirants for their Country's Service, particularly at the present juncture, that we would here call attention only to one or two aspects of it for our present guidance. At no period of her history, India has very seriously lacked pioneer-leaders. But they have always mainly concerned themselves with materials and opportunities to hand and have done perhaps nothing to create opportunities in relation to their ultimate goal and mould the material to suit the ultimate realisation. To us it appears that Dr. Besant's leadership in a very special way differs in this particular respect from all other leadership. Dr. Besant, since she arrived in India, has formed a clear conception of what was wanted for this country, if it was again to come into its own and make that contribution to the world's stature which is the justifi-



DR. ANNIE BESANT, D. L.

cation for the existence of every people, State or Nation; and she has laid the course of her work to subserve that end. Whether, then, the work is religious, social, spiritual, or political, the aim has always been to broaden India's mind by knocking off the encrustation that centuries of the play of opposing forces of varied character in the land had gathered round her, to recall her to her self-respect and spiritual outlook so that India's Mission may be fulfilled by her sons in its entirety. Few of our leaders have understood the complexity and many-sidedness of our problem as Dr. Besant has. Our social reformers have dreamt of redemption of our country through Social Reform, even if political reform lagged far behind or was even neglected. So with political and religious reformers. They did not, it appears from their work, visualise the country's problem as a whole, but were content in polishing and refining their own facet of it; and the inevitable result has been that some of our very advanced political reformers have been the most conservative in their attitude towards social or religious reforms, and advanced Social Reformers have lagged far behind when the country had passed on in its political advance, so that the machinery for advance has been sacrificed to reforming zeal. But Dr. Besant has slowly but steadily advanced, along the whole front, seeking to prepare the country for its ultimate destiny through, as we have said above, religious, social and political reform, and thus proved that there is no real advance ultimately till all the aspects of Reform are visualised at once and tackled as opportunity offers. Thus has she always controlled her army of adherents at all times and there have never been, within its ranks, any aberrations of any serious character. Lopsidedness has certainly never been the defect of this reformer's work, and there never was room for wild hopes and as severe disappointments, for all-round growth has meant always steady, constant work, and fruit only in proportion to earnestness and zeal.

This we would offer as a serious lesson of Dr. Besant's work to the rising young generation: Visualisation of the goal and moulding the material in all its aspects for the goal in view.

On our young citizens will the burden of conducting their country's affairs soon devolve, and it is a good sign that all over this land young men are realising that they are the architects of her future. But our country's past is of such a varied nature that peculiar responsibility will rest on those who would be the leaders of Home-Ruled India. During our immediate past, the forces that inspired some of our political and other aspirations were far from reasonable or sober. An atmosphere of suspicion, doubt, even hatred, has enveloped our life. Strange hopes were raised, stranger methods employed, with the result that many disappointments, disillusionings, and wrecks of loved hopes strewn our path during the last three or four years, and this is bound to leave a legacy of at least resentment. It has given us curious gospels and filled our minds with odd fancies of our strength, our ability, our spirituality, in contradistinction of those who are to-day opposed to us. Our real problems have got pushed in the background and we have failed to take account of forces opposed to us, either through the skill of our opponents or our own defects. There is no reason in all this for discouragement of any kind, if we but remember, as Prof. Murdoch of Australia reminds us:

Forgetful is green earth; the gods alone
Remember everlastingly; they strike
Remorselessly, and ever like for like;
By their great memories the gods are known.

That there is Eternal Justice in the World is the teaching of these lines, and if we so direct our life and training now that we provide against the brood of "chickens coming home to roost," and learn betimes the lesson of history and direct our attitudes by the inspiration of it, we shall have provided against all the difficulties and dangers that our immediate past might have bred and thus be hampering our future. But for this, clear visualisation of our goal is essential as also a steady preparation for it. This is where, to our mind, lies the highest value of Dr. Annie Besant's work among us and its lessons.

In The World's Service

S. Francis of Assisi

IN the North Italian town of Assisi, at the end of the twelfth century, lived a rich cloth merchant called Pietro Bernardone. To him had been born, in the year 1182, a son who was named Giovanni, but later known as Francesco or Francis, perhaps because he loved so much the songs of the French Troubadours, those wandering Minstrels of Provence, initiates of the Gay Science to which English Chaucer also belonged, who were inheritors of a great Mystic Tradition which Rome had vainly tried to stamp out as heresy.

Young Francis had a great capacity for joy, and, in early life, showed no bias to any form of asceticism. Freely indulged by his parents, he lived like a prince, but his wise mother foresaw that he would later be more especially a Child of God. Even in these worldly days, he had a great generosity, shown one day by his rushing through the market in search of a beggar to whose pleading he had been forced to remain deaf while attending on a rich customer of his father's. Having with some difficulty found the man, he poured

out on him all the money in his possession, taking thereupon an oath that he would never refuse aid to one who asked alms.

On another similar impulse of large-hearted charity, he once exchanged his own rich clothes

with the worn garments of a broken-down soldier whom he met by chance. Following on this he had a dream in which he believed himself called to a soldier's life, but he was frustrated in two military adventures, first by a short captivity, and then by severe illness, in which he had further dreams, warning him that he had not yet found his right way of service. So he returned, discouraged, to Assisi, to spend some months in aimless wanderings, on foot and horseback, while he sought to find his vocation. One day he saw approaching him a leper, and with



S. FRANCIS OF ASSISI

a shudder turned his horse's head to avoid him, for the sight of lepers had always been especially repellent to his poetic temperament. But suddenly an inner voice reproached him, that he should be a coward in face of this fell disease, though professing bravery sufficient for a

soldier's career. Forcing himself to turn and stop, he flung himself from his horse, and going to the leper felt a wonderful tide of love surge over him for this poor brother, whom he em-



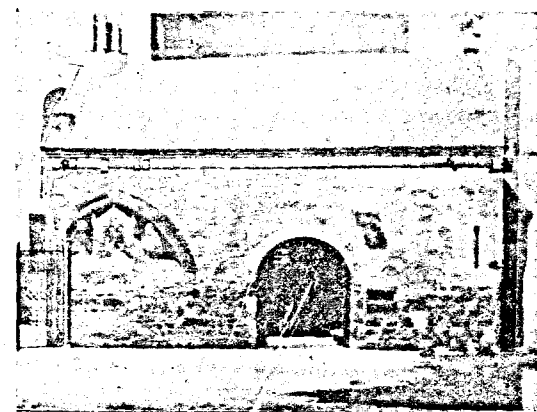
Le Celle (Near Crotona)

braced with tears of joy. So he found his vocation to be that of loving service to the lowest of outcastes.

To his father, Francis' changed demeanor wore the guise of madness. It is not easy to live up to being the father of a saint, and we may pity the poor man in his disappointment at his brilliant son's eccentricity. Soon came the final breaking of the tie. Seated in meditation by the ruined Church of S. Damian, Francis heard a voice: "Seest thou not that my house is in ruins? Go and restore it for me." With his characteristic headlong impetuosity, Francis took the words literally to apply to the ruined building near him, and at once rushed home, seized a bale of his father's cloth, carried it to the town to realise its value, and took the gold thus obtained to the priest of S. Damian's Church, for the restoration of the building. The priest hesitated to accept the money, and Pietro Benardone was furious with his son, laying violent hands on him, and even imprisoning him to force him to return the money. This Francis steadily refused, till at last the matter was referred to the Bishop, who

finally persuaded him to restore the sum to his father. The latter had recovered his gold, but at a heavy price. Had he but made a wiser choice, his great son would surely have honored the filial debt in richer treasure; but now, in the Bishop's court, Francis stripped himself even of his clothes that his father had given him, and standing in his hair shirt repudiated the parental tie: "Up to this time I had called Pietro Bernardone father, but now I am the servant of God. Not only money but everything that can be called his I will restore to him, even the very clothes he has given me."

Francis now took up his abode in a little cell outside the town, conveniently near to the Lazar House, and here he was soon joined by two noble companions. One was a man of great wealth, which at S. Francis' behest he gave wholly away to the poor, while the other was already a man in holy orders. Clothing themselves in rough brown cloth given by a charitable lady, barefoot, and with a coarse rope for girdle, they spent their days in prayer and service of the needy, taking thankfully whatever was offered them, and accepting mockery and scorn with such genuine meekness and even exultation, in the fervor of self-sacrifice, that soon the most worldly began to respect them. When the little band increased to seven, Francis wrote for them a rule, basing it simply on the Christ's instructions to His First Apostles.



The Chapel of Porziuncola

Chief of all, they were to hold fast to Lady Poverty, and, like their Master, "take no thought for the morrow," working with their hands in honest toil and begging when needful

for the simplest food, while always giving freely their loving service to all who needed it.

Even in these humble beginnings, Francis had faith that his mission was to be world-wide, and despite the dissuasion of the Bishop, who thought such authorisation absurdly unnecessary, he set out to walk to Rome, to get the Pope's blessing on his new Order—of Minor Brothers, or Little Friars, as they called themselves. The Pope was startled when an unkempt and haggard-looking beggar thrust himself into his path one day, as he walked in the Vatican Gardens, and he testily dismissed the mad man. But that night he dreamt that the Church was tottering to its fall, and that the same brown-frocked beggar was alone sustaining it; and so, warned that the movement was to be encouraged, he sent for Francis, and considered his plea. Protesting that the rule was too severe for mere mortals, he yet gave his consent to the establishment of the Order. Armed with his authorisation, Francis returned rejoicing to Assisi, and the number of his followers began to grow apace, so that Friars could soon be sent out, two and two, as their Apostolic predecessors had been sent, to do their simple works of love and faith.

Fired by the preaching and example of Francis, a rich maiden named Clara resolved to forsake her home, and follow the path of holiness. Convinced of her true vocation, Francis assisted her to escape from her home, and after she had solemnly dedicated herself in the little Chapel of S. Damian's, he obtained for her the use of some cells belonging to the Chapel, where other ladies joined her in the Order of Poor Clares. It is pleasant to read that later her sister and mother joined her in the Order, so her repudiation of family claims had been to their ultimate gain as well as hers. She and S. Francis were ever close friends, so that he would often seek her advice in difficulties, trusting sometimes to her spiritual intuition rather than his own.

Very beautiful are some of the tales told of the Saint in *Little Flowers of S. Francis*, as of his preaching to the swallows and the larks, his "little brothers and sisters," as he called them. "Above all other birds he loved a certain little bird which is called a lark, or, by the people, the cowed lark. And he used to say of it: "Sister Lark hath a cowl like a

religious, and she is a humble bird, because she goes willingly by the road to find there any food. But flying, she praises God very sweetly like a good religious, despising earthly things, whose conversation is always in the heavens." It seems that his poet's fancy was much akin to Wordsworth's here. Indeed S. Francis was himself a poet of no mean order, and one poem has descended to us called "The Song of Brother Sun," which he composed when actually suffering the acutest pain from a disease of the eyes, which rendered him blind for months. Yet he could share in a tone of real exultation, the praise that all nature was lifting to God, with Brother Sun and Sister Moon, Brother Wind, Sister Water, Brother Fire and Sister-Mother Earth.

We read in one story that, having gone to a certain village, he began to sweep and clean it, and in another, how lovingly he screened a brother's weakness, by himself preparing and sharing with him some special delicacy which his body craved, but which he thought the rules denied. Francis would have his friars wise in their self-denial, treating "Brother Ass, the body," with sensible humanity, so as to have strength to do good work.

S. Francis had so great a heart that he could not leave unchallenged any wrong, however monstrously unassailable it seemed. He could not feel satisfied with the nature of the warfare going on between Christians and Musalmans, in Palestine and Spain. So with a few companions once, and, on another occasion, quite alone, he set out on a voyage to the East, to convert the followers of Muhammad to the love of Christ. Through all sorts of difficulties and dangers, and in spite of illness, he won his way to the Soldan, and made a secret convert of him, if the chronicler is to be believed. But the Soldan seems to have deterred him from further missionary efforts just then, and he hastened back to Italy on receiving news that division was arising within the Order, stirred up by brothers who wished for some relaxation of the rules, especially in the direction of allowing more intellectual study and also improvement in the housing of the Friars. So popular had the Little Brothers become that money came freely now in excess of their needs, and in

some places grand Friaries were being built, on which Francis looked with horror, insisting, in one case, that brick by brick it should be demolished, and the Brothers go back to the mud and wattle huts that suited their holy poverty.

But in this respect the Order had already grown beyond its Founder's control, and sad at heart he had to concede, with a humility very characteristic of him, points which to his sounder judgment seemed vital to the permanency of its usefulness. He was worn out, too, in body, though not much over forty, and nearly blind, though he had cheerfully consented to horrible tortures being inflicted on him by so-called doctors, who hoped to heal the disease.

A certain noble convert offered him a mount called S. Verna, as a place of retreat, and thither he went with his three best loved companions. Here he found a place, beyond a

chasm and difficult of access, where he remained alone for forty days, his companions being bidden to come once a day within earshot, but on no account to disturb him. Under these circumstances, he attained to the crown of his mystical experiences, signalised in the body by the imprint of the five Sacred Wounds of the Christ, the Stigmata. On these and the somewhat morbid devotion with which they were regarded, the modern mind does not care to dwell. But there seems to be no doubt that this man penetrated to the full the mystery of pain, suffering a real crucifixion in the body, without ever losing the Spirit of Joy.

At last the doctors told him that his hours were numbered, and to his "Song of Brother Sun" he added a verse in joyful welcome of "Our Sister Bodily Death". So passed away this heroic soldier of the Christ, this ardent Heart of Love.

H. V.



Christ of Everywhere

"Christ of the Andes,"
Christ of Everywhere,
Great lover of the hills,
the open air,
And patient lover of
impatient men
Who blindly strive and sin
and strive again—
Thou Living Word, larger
than any creed,
Thou Love Divine, uttered in
human deed—
Oh, teach the world, warring
and wandering still,
Thy Way of Peace, the
Footpath of Good Will!

HENRY VAN DYKE.

[This statue "The Christ of the Andes," by the Argentine sculptor, Mateo Alonso, commemorating the peaceful settlement of boundary disputes between Chile and Argentina, was cast in bronze melted down from cannon and dedicated in March, 1904.]—*Our World*

Nanda, the Pariah Saint

BY M. D.

DURING Gandhiji's sojourn in South India, last March, I heard the story of Nanda, the Pariah Saint, from several lips. We had been in South India twice before this, but had never heard of Nanda. The good fortune this time was entirely due to the fact that the tour was pre-eminently an anti-untouchability tour. "Nanda, a pariah, was canonised centuries ago by Brahmanas themselves," said a friend who told me the story, "and to-day's Brahmanas are proving false to their ancestors." I thought I had better get together the facts about this remarkable Saint. I hit upon an interesting story of the Saint in Mr. Madhavia's *Nanda*, and I summarise it here for the readers of *Young India*.

It is difficult to ascertain the precise date of Nanda's birth, as in the case of many of our Saints, but it is fairly certain that he was born about six hundred years ago of pariah parents in Adhanur, a village in the Tanjore District. The word "pariah," which ever since the late Mr. Gokhalé used the telling phrase, "the pariahs in the Empire," has passed into the English language, is derived from the Tamil *parai* a drum, *pariah* meaning a drummer. He naturally thus takes charge of the dead cattle, looks to their disposal, treats and tans the hides and sells them. He is also an agricultural laborer. I need not dilate on the pariah's miserable lot, his wretched huts, his squalid surroundings, and the life of filth and mire which has been forced upon him. The life the superior class of Hindus has compelled him to lead has brought other evils also. He has to stay far away from human haunts, he eats carrion or beef, drinks foul water and inferior toddy or liquor, whenever he can get it, to forget the wretchedness of his lot.

Boy Nanda was like any other of his class in all respects, but one. God had blessed him with a fair measure of pity for lower animals, and the bleating of a lamb or the screeching of a fowl under the knife would send a shudder through his body and fill his eyes with tears. He was, of course, used to animal food, but not to seeing animals actually slaughtered. One

day he happened to eat stale beef, and got very ill. His mother was very much upset; she thought that the Gods were angry, and as was the custom among them whenever anyone in the family was ill, she vowed to propitiate the Demon Katteri by sacrificing a goat to him. Nanda got better in the usual course, and the goat had now to be sacrificed. There was no money to buy one with, but there was a lovely little goat in the house itself, which was the delight of Nanda's heart, and which loved Nanda so much that it would refuse fodder when Nanda was ill. The choice was, therefore, before them to displease the Gods or to displease Nanda, and they preferred the lesser evil. Whilst Nanda was yet in bed one day they went and sacrificed Nanda's pet goat, of which Nanda saw the carcase when he awoke. This was Nanda's first shock in life. He wept bitter tears and remained disconsolate for days. The iron had gone into his soul and he began to examine himself, and his surroundings. "Mother, what do the Brahmanas do, in case their boys get ill? Do they also sacrifice goats like we do?" was the question he put to his mother one day. "Nothing of the sort, my boy," she said, "they pray to their Gods and break cocoanuts before them and offer sweets." "Why should we then kill innocent goats?" asked Nanda. "Their Gods are not like ours, they are benign and not fierce like ours. Ours are revengeful and would be satisfied by nothing but flesh and blood." "But, then, why should we not pray too, like the Brahmanas?" asked the insatiable boy. "How silly," said the mother starting at the very idea, "how silly! How can we, pariahs, pray to Brahmanas' Gods? Are we like Brahmanas? We eat meat and beef, we drink liquor, we are so filthy. How can we worship Brahmanas' Gods?"

Nanda was silenced that day, but the truth within him was not silenced. He vowed that henceforth he would not tell his father or mother if ever he fell ill. No goats would be killed for his sake, and he would pray to the benign Gods to cure him. But how were his prayers to reach them, when he was not like the Brahmana boys? "No meat or liquor for me

therefore, henceforth," he said to himself. He had heard of the law of Karma being cited by his mother so often. What was that law? Were his Karmas so horrible that he should have to be born a hundred times before he was fit enough to pray to the benign Gods? But if he like the Brahmanas did not touch meat or liquor, and allowed no goats to be killed for him, would it not be enough? Or, did the Brahmanas belong to a superior species? But he had eyes and ears and every other limb like the Brahmana boys. Were their blood and bones different?

One evening, whilst Nanda was grazing cattle in a field near a threshing floor, some boys, among whom there was his Brahmana master's son, were playing *kitti pillu*. Suddenly *kitti* came whistling through the air and dropped on the field. Fain would Nanda pick it up and give it to his young master, but how dare he do it? The young master came running, picked it up and, as he was running back, had a fall over a stone and began to bleed profusely. He sprained his ankle also and cried out for help. Nanda ran to the spot at once, was touched by the sight of blood, but stood at a distance. The Brahmana master could not even bear his going to succor him, called him names, and flung a stone sharply at him. It struck Nanda on the temple, he fainted and fell down, bleeding. The other boys were there to help the Brahmana boy, but Nanda got only jeers. As soon as Nanda recovered himself he got up and walked back home, lost in deep thought. So his blood was like Brahmana blood and equally like any other blood? But why was the Brahmana boy so ungrateful and callous? And if Gods heard the prayers of such boys, would they not hear *his*?

The opportunity was coming. Nanda was now a fairly grown up boy, and he lost no time in sharing his thoughts and troubles with boys of his age. He had thus a small band of boys who were fully with him in his views, if not always with him in his plans. Once some pariahs from a neighboring village came with cholera on, and infected the whole village of Adhanur. Nanda's father was first attacked, and died within an hour. Some of Nanda's own band also were carried off, and the elders of the place, who were very angry with Nanda

because of his reforming zeal, now openly declared that the epidemic was nothing but a visitation from the Gods. Nanda had offended. They threatened him with all kinds of punishments. In course of time, he too was in the grip of cholera and the elders were glad that their forebodings were coming true. Nanda's mother's fortitude was shaken, and she urged Nanda to permit her to vow to sacrifice a goat. His friends also followed suit. But he was adamant. Why should he take away a life to save his life? "The moment has come when our faith is going to be tested," he said to his friends. "We have often gazed at the gopuram of yonder Tiruppunker and longed to see the great Shiva. He is putting us to test. I shall only pray to him and ask you also to do likewise." "But we are only pariahs," they argued, "and he is the God of the Brahmanas." To which Nanda could now say: "But Brahmana and pariah are one in the eyes of Shiva. Let me pray to him and you also pray for me." They obeyed and prayed as best as they could. In another corner of the village were the elders met in solemn conclave and cursing Nanda and even wishing for his death. Nanda's poor mother fell an easy victim to their evil counsels and said: "I agree my son has erred and we are reaping the fruit of his folly. We are too poor to buy a goat, but I have a *thali* which I can spare. Get a goat with it and sacrifice it to Katteri."

Nanda's prayers had been heard. He had not slept in the night, but had been praying, and at the end had something like a vision. God Shiva of Tiruppunker had appeared before him and blessed him. He woke up absolutely cured, and when he told his friends what had happened, there burst forth a shout of victory to Mahadeva.

Nanda's mother, in her turn, sacrificed a goat, and also sung praises to Shiva. Nanda now thought of a pilgrimage to Tiruppunker to offer his thanks to the God who had saved him. He had enough presents to carry with him, as his band had also now fully cast in their lot with him. They took big pieces of leather and also *gorochana*, a perfume used by the worshippers, and obtained from certain parts of carcasses. To these they added a few cocoanuts and bananas.

They had their baths and smeared their bodies with sacred ashes and marched forth to Tiruppunker. On reaching the Temple, they went round it thrice and sent word to the priests, who sent their servants to receive the presents. The presents delivered, they stood in front of the Temple gates, to get a glimpse of the image. Nanda could see some of the lights and the worshippers, but no image, as the huge figure of Nandi hid the image from view. Nanda went from side to side, but to no purpose. His grief knew no bounds. The sweet smell of *gorochana* and frankincense choked him and made him half-senseless. "Oh, I am a pariah and a sinner, and my sins have taken the form of the Nandi Bull to hide the God from me," he cried, and again fell in a trance. When he awoke, lo, to the surprise of all, the stone Nandi had leaned to one side, giving a full view of Mahadeva! To this day the Nandi at Tiruppunker is not in front of Mahadeva, but slightly bent towards one side and the story goes that God did it out of pity for Nanda.

IV

It is said that Nanda and his band out of gratefulness dug a tank before the Temple of Tiruppunker, and kept on making free gifts of leather and *gorochana* to the Brahmana Temple. They also made it a point to attend Temple festivals, even though it may be from a distance, and offer their gifts to propitiate the Brahmana Gods. At one of these festivals, Nanda heard for the first time a Brahmana *pûrânîk* telling the story of Natarâja at Chidambaram. Nanda drank in every item of the story, one thing going straight to his heart: "He who sees Natarâja at Chidambaram crosses the ocean of life, even if he be a *chândâla*." Those words contained nectar for him, and he impatiently asked the Brahmana: "Pray, tell me where is Chidambaram." "Only about a day's journey," replied the Brahmana. "And does Natarâja save even *chândâlas*, in very truth?" "Certainly," was the reassuring reply, and the Brahmana even gave his authority for it—*Sthala-Purâna*.

That gave Nanda the signal for another spiritual effort, and he hastened to start for the North, telling his friends that he had set his heart on seeing Natarâja and being free from death and birth. "How can we take a Brahmana

too literally?" they must have remonstrated. But Nanda stuck to his resolution, until a clever friend laid his finger on what he thought was Nanda's weakest spot—his obedience to his master. "We are servants yet. We came here, because we were off duty, but how can we take a holiday without so much as seeing the master?" And Nanda immediately consented to go back to Adhanur. All the hours of the day Nanda thought of nothing but Natarâja, and often saw visions of that God's eternal dance and play, in the objects around. People began to regard him as mad—as he would often stop in the midst of work and stand gazing at the sun, and, when accosted, would say: "I was lost in admiring Natarâja's Dance in the sun." Nanda's master was shocked at these antics, and he once ordered him to be brought in his presence. "What is this madness, Nanda? Or, are you itching for the whip?" he asked. "I am itching to see Natarâja; pray, permit me to go. I shall soon come back," was Nanda's reply. The master was even more angry at what to him was Nanda's presumption. "Have you forgotten that you are a pariah?" the wise man argued with him. "I have not. But the Tiruppunker God was once merciful to me, and I doubt not that even Natarâja also can be seen by me," Nanda replied. "A Brahmana like you assured me that even a *chândâla* could be free from birth and death by seeing Natarâja."

The wise men of the village told Nanda's master that it was all the mischief of that Brahmana *pûrânîk*, and asked him to permit him to go to Chidambaram and return wiser. "But he must first harvest the six fields," said the master. At this Nanda danced with joy and straight went to the fields, sickle in hand. Before daybreak he was back to tell the master that the harvesting was complete and that the crops were there properly stacked on the threshing-floor. The master could not believe it. "You must have hired laborers. Speak out the truth," said he. "I worked the whole night," said Nanda, "and none helped me, except it be the merciful God Natarâja." The master proceeded to the threshing-floor and was surprised to see many days' and many men's work done by Nanda single-handed in the course of a night. That was the very thresh-

ing-floor from which the proud master, as a lad, had disdained to look at Nanda proffering his help, and had struck him on his temple, the scar still bearing witness to the story. All that passed before the Brahmana master's mind as in a flash, and the tears of contrition washed all vanity off his heart. "Oh, Nanda, my Nanda, come and hug me. All these years I did not know you," he cried in a broken voice. "Forgive me and bless me."

But Nanda drew back and simply said: "You are my master and I your slave. You need not ask for forgiveness. Pray permit me to go to Chidambaram."

VI

The permission was now given out of a warm and contrite heart and Nanda and his friends reached Chidambaram the next day. Nanda prostrated himself before the Temple as he first sighted the top and went round the village as soon as he reached it.

But how was the Temple to be approached? There were 2999 *dikshitar*s guarding the Temple. They took the gifts, but scouted the idea of Nanda ever seeing Natarāja. Nanda cited the authority of *Sthala-Purāna*, the only scripture he had heard, and that too only by name. "Right enough," said they, "but there is no authority in the text for a pariah to enter the Temple." So Nanda sat disconsolate the night through, before the Temple wall, now hoping and fearing and yet for ever praying.

Whether it was the result of these prayers or something else, the *dikshitar*s of Chidambaram had the same dream that night. Natarāja appeared before them and said: "Nanda, the Adhanur pariah, has come to see Me at My bidding. Though a pariah he is pure in thought, word and deed. His love for Me is without bounds. Make him pure in body and bring him to see Me." And they met in solemn conclave to interpret the dream.

Ecce Homo

Standing on the heights of Purity and Love,
Surrounded by the æons of endless Light,
Is He, Whom men call Christ.
Far adown the ages come stealing from above
His dulcet tones: "Till Faith be lost in sight,
I wait and watch, whom men call Christ."

"We must obey Natarāja's command straight away," said one. "But he is a pariah and we have to make him pure in body," said another. "The easiest way to do that is to give him a bath in the Homakkulam," said a third one. Yet another said: "No, he must first be burnt to ashes and the ashes taken to Natarāja." A kind-hearted *dikshita* was shocked at this and said: "Agni alone can make him pure, it is true. But don't take the text literally. Even cow's dung, burnt to ashes, will do." But others had set their hearts on a drastic plan and wanted to punish the pariah's presumption, if possible. Nanda must purify himself by passing through the fire, they insisted. These things reached Nanda's ears, and he jumped and danced with joy and begged of them to get the fire ready. "Even if Natarāja burns me up," he said to himself, "He will do it because He thinks it the best way to end this life of slavery." And so he had a bath in the Homakkulam, smeared his forehead with sacred ashes, and with the wet cloth round his loins walked thrice round the blazing fire, saluted the Temple gate, and leapt into the flames with prayer on his lips and joy in his heart.

For some time there was death-like silence all around, and then arose a peal of joyous cry: *Hara! Hara! Mahādeva*, as Nanda came out unscathed, his wet cloth still dripping with water!

The humiliation of the Brahmanas was complete. They saluted Nanda and led him to Natarāja's Image. They showed him over the sacred spots as they went, but Nanda saw them not. As he saw Natarāja he gazed and gazed on Him, until he was one with that Benign Presence.

Nanda the Pariah, is now one of the Three Score and Three Shaivite Saints of the Tamil Land, his image being worshipped like other images in most of the temples.

We think that we in darkness strive all alone,
Unknowing that within the inmost shrine
Is He, whom men call Christ.
Whom knowing, all the scattered links entwine,
For all the worlds are one
In Him, whom men call Christ.

Test Yourself and See How You Compare With College Students

Some Universities are not accepting students who fail to pass "Intelligence Tests" with a satisfactory rating—Try the ones given here and find out what your chance would be.

AN INTERVIEW WITH WALTER DILL SCOTT BY ALLAN HARDING
(Concluded)

TEST NUMBER 2

The words "A eats cow grass" in that order are mixed up and don't make a sentence; but they would make a sentence if put in the right order: "A cow eats grass," and this statement is true.

Again, the words "Horses feathers have all" would make a sentence if put in the order "All horses have feathers," but this statement is false.

Below are twenty-four mixed up sentences. Some of them are true and some are false. Take these sentences one at a time. Think what each would say if the words were straightened out, but don't write them yourself. Then, if what it would say is true, draw a line under the word "true"; if what it would say is false, draw a line under the word "false". If you cannot be sure, guess. The two samples are already marked as they should be. Begin with No. 1 and work right down the page until time is called. The time limit is two minutes.

SAMPLES		{ a eats cow grass		... true	false	
		{ horses feathers have all		... true	false	
1	oranges yellow are	... true	false	1		
2	hear are with to ears	... true	false	2		
3	noise cannon never make a	... true	false	3		
4	trees in nests build birds	... true	false	4		
5	oil water not and will mix	... true	false	5		
6	bad are shots soldiers all	... true	false	6		
7	fuel wood are coal and for used	... true	false	7		
8	moon earth the only from feet	... true	false	8		
	twenty the is	... true	false	8		
9	to life water is necessary	... true	false	9		
10	are clothes all made cotton of	... true	false	10		
11	horses automobile an are than	... true	false	11		
	slower	... true	false	11		
12	tropics is in the produced rubber	... true	false	12		
13	leaves the trees in lose their fall	... true	false	13		
14	place pole is north comfortable a	... true	false	14		
	the	... true	false	14		
15	sand of made bread powder and is	... true	false	15		
16	sails is steamboat usually by pro-	... true	false	16		
	pelled a	... true	false	16		
17	is the salty in water all lakes	... true	false	17		
18	usually judge can we actions man	... true	false	18		
	his by a	... true	false	18		
19	men misfortune have good never	... true	false	19		
20	tools valuable is for sharp making	... true	false	20		
	steel	... true	false	20		
21	due sometimes calamities are acci-	... true	false	21		
	dent to	... true	false	21		
22	forget trifling friends grievances	... true	false	22		
	never	... true	false	22		
23	feeling is of painful exaltation the	... true	false	23		
24	begin a and apple acorn ant words	... true	false	24		
	with the	... true	false	24		

TEST NUMBER 3

	2	4	6	8	10	12	14	16
	9	8	7	6	5	4	3	2
Samples	2	2	3	3	4	4	5	5
	1	7	2	7	3	7	4	7

Look at each row of numbers below, and on the two dotted lines write the two numbers that should come next. The time limit for this test is three minutes.

3	4	5	6	7	8	...	...
8	7	6	5	4	3	...	...
10	15	20	25	30	35	...	...
9	9	7	7	5	5	...	...
3	6	9	12	15	18	...	...
8	1	6	1	4	1	...	...
5	9	13	17	21	25	...	...
8	9	12	13	16	17	...	...
27	27	23	23	19	19	...	...
1	2	4	8	16	32	...	...
19	16	14	11	9	6	...	...
11	13	12	14	13	15	...	...
2	3	5	8	12	17	...	...
18	14	17	13	16	12	...	...
29	28	26	23	19	14	...	...
20	17	15	14	11	9	...	...
81	27	9	3	1	13	...	...
1	4	9	16	25	36	...	...
16	17	15	18	14	19	...	...
3	6	8	16	18	36	...	...

TEST NUMBER 4

SAMPLES	sky—blue::grass—table	green	warm	big
	fish—swims::man—paper	time	walks	girl
	day—night::white—red	black	clear	pure

In each of the lines below, the first two words are related to each other in some way. What you are to do in each line is to see what the relation is between the first two words, and underline the word in heavy type that is related in the same way to the third word. Begin with No. 1 and mark as many sets as you can before time is called. The time limit for this test is three minutes.

1	shoe—foot :: hat—kitten	head	knife	penny	...	1	
2	pup—dog :: lamb—red	door	sheep	book	...	2	
3	spring—summer :: autumn—winter	warm	har-	vest	rise	...	3
4	devil—angel :: bad—mean	disobedient	defamed	good	...	4	

5	finger—hand :: toe—body foot skin nail	...	5	"Within the three years from 1919-21 inclusive,"
6	legs—frog :: wings—eat swim bird nest	...	6	said Dr. Scott, "2,000 students entered the fresh-
7	chew—teeth :: smell—sweet stink odor nose	...	7	man classes of our College of Liberal Arts. Imme-
8	lion—roar :: dog—drive pony bark harness	...	8	diately after registration, mental alertness tests
9	cat—tiger :: dog—wolf bark bite snap	...	9	were given as a part of the regular college work.
10	good—bad :: long—tall big snake short	...	10	Out of the 2,000 students, six per cent had stood in
11	giant—large :: dwarf—jungle small beard ugly	...	11	the lowest quarter of their high school class in
12	winter—season :: January—February day month	...	12	scholarship. Of these, two-thirds failed to secure
	Christmas	...		as high a grade in mental alertness tests as the
13	skating—winter :: swimming—diving floating	...	13	average of our entire freshman class. Of this group
	hole summer	...		of those who stood low in high school and low in
14	blonde—light :: brunette—dark hair brilliant	...	14	mental alertness tests, only about one in seven did
	blonde	...		work of even a passing grade in their later career
15	love—friend :: hate—malice saint enemy dislike	...	15	in college; and only one in fourteen remained in
16	egg—bird :: seed—grow plant crack germinate	...	16	college until the end of their first year!
17	dig—trench :: build—run house spade bullet	...	17	"It is conceivable that many of these who failed
18	agree—quarrel :: friend—comrade need mother	...	18	and dropped out might have been retained if we
	enemy	...		had provided sufficient individual attention and a
19	palace—king :: hut—peasant cottage farm city	...	19	more favorable environment.
20	cloud—burst—shower :: cyclone—bath breeze	...	20	"I do not want to over-emphasize the importance
	destroy West	...		of the mental alertness tests. But it cannot be
21	Washington—Adams :: first—president second	...	21	denied that they are a remarkably sure indication
	last Bryan	...		of a person's natural quickness of mind. A man
22	parents—command :: children—men shall women	...	22	who hasn't an alert and active mind cannot do
	obey	...		certain kinds of work. He will be saved time,
23	diamond—rare :: iron—common silver ore steel	...	23	trouble, and disappointment if he finds this out, and
24	yes—affirmative :: no—think knowledge yes	...	24	directs his affairs accordingly.
	negative	...		"For example, suppose a student with a low
25	hour—day :: day—night week hour noon	...	25	rating in mental alertness said that he wanted to
26	eye—head :: window—key floor room door	...	26	enter the Medical College of the University. I
27	clothes—man :: hair—horse comb beard hat	...	27	should advise him against it. A physician is pre-
28	draw—picture :: make—destroy table break hard	...	28	eminently in need of this very quality of quick and
29	automobile—wagon :: motorcycle—ride speed bi-	...	29	keen mental activity. I have a moral obligation,
	cycle car	...		not only to the student himself but to his prospec-
30	granary—wheat :: library—read books paper	...	30	tive patients. I don't want to see him become an
	chairs	...		incompetent and unsuccessful physician. But I
31	Caucasian—English :: Mongolian—Chinese In-	...	31	also want to protect suffering humanity against
	dian negro yellow	...		his incompetence. So I should try to keep him out
32	Indiana—United States :: part—hair China Ohio	...	32	of the medical profession.
	whole	...		"One way in which the mental alertness tests
33	esteem—despise :: friends—Quakers enemies	...	33	help us is by enabling us to divide the students
	lovers men	...		into groups, where they can work to the best
34	abide—stay :: depart—come hence leave late	...	34	advantage. In one group, we can place those who
35	abundant—scarce :: cheap—buy costly bargain	...	35	learn easily, who comprehend quickly, and who
	nasty	...		'eat up' work rapidly. They may have picked out
36	whale—large :: thunder—loud rain lightning	...	36	courses which will not give them enough to do.
	kill	...		We can advise them to take more work and can
37	reward—hero :: punish—God everlasting pain	...	37	help them to choose it.
	traitor	...		"The slower intellects should be in another
38	music—soothing :: noise—hear distracting sound	...	38	group by themselves. They need more deliberate
	report	...		and pains-taking explanation of subjects. If they
39	book—writer :: statue—sculptor liberty picture	...	39	are properly taught, they can acquire sound and
	state	...		thorough knowledge, although the range of subjects
40	wound—pain :: health—sickness disease exha-	...	40	will be somewhat limited. But that is not a seri-
	ration doctor	...		

This is a rather startling statement, but President Scott gave me some figures which confirmed it.

ous drawback. It is better to know even one thing thoroughly than to have only a smattering of many things.

"People who are below the average in mental alertness must make up their minds to *work* for whatever they may achieve. This applies not only to college students, but to men in business, in the professions—in fact, to all of us. The man with a quick, active mind starts with a certain advantage.

"But this is not as unfair as it may seem. If the slower man *realizes* that he has got to work harder for whatever he wants, it gives him a spur which his more brilliant competitor lacks. There are thousands of men at the top to-day who couldn't pass mental alertness tests with more than an average rating. They are there because they had other qualities which more than compensated for their lack of this quickness of mind. You can't choose the type of mind you are born with; but you can choose how hard you will make it work.

"There are some people who have quick minds, but who have no taste for book-learning. A boy of that type probably would be wasting his time in college. He should go into some congenial occupation where he will get training through practical experience.

"There is the question, too, of environment. Occasionally, we find a boy who is out of his element in a large University. He is slow at his studies, backward in making friends, oppressed by his apparent insignificance among thousands of other human beings, to whom he doesn't seem even to exist.

"I have sometimes advised that such a boy be placed in a smaller college. In several cases, this has been done, and with very satisfactory results.

"People of that type—with a slow mind and an unimpressive personality—are submerged in a crowd. As a rule, they will be happier and will develop more rapidly, if they make themselves a part of a smaller group. Generally speaking, I think they are more in their element, not only in

the smaller schools but in the smaller towns, smaller business organizations, smaller churches, and so on."

I asked Mr. Hopkins if a person might not make a poor showing in the mental alertness tests because of some temporary condition, such as a bad headache, fatigue from lack of sleep, or something like that. We all know that there are days when we feel "up and coming" and that there are other days when we feel dull and heavy.

"Wouldn't you get different results from the same student if he took the tests more than once?" I asked.

"There might be a few points," he said; "but it wouldn't materially change the result. Of course, if a person had a very bad headache, or any decided indisposition, it would be better for him to postpone the test. But it wouldn't make as much difference as you think.

"In estimating mental alertness as a factor in what a person is capable of doing, we don't draw fine lines and set them up as insurmountable barriers. For instance, it would be foolish to say that a man who passes the tests with a rating of sixty cannot achieve as much, and in the same line of work, as a man who gets a rating of seventy. They are in the same general class, so far as intelligence goes.

"A man who is rated only fifty in mental alertness may accomplish more than one who is rated seventy or eighty, provided he has more energy, ambition and persistence. He may accomplish more because he has better health, or a more attractive personality, or is in a more favorable environment.

"But a man who cannot get more than thirty in a mental alertness test cannot compete in work that involves quick thinking, or the ability to learn out of books, with a man who is rated at eighty, for example. He ought not to try. If he does, he will certainly fail. Yet he may have qualities that will be valuable in other lines of work."—*American Magazine*

Freezing a Fire

A new kind of fire extinguisher has been invented for use in petrol store-houses, oil-tankers, and other structures containing inflammable substances.

When directed on a blaze these devices actually freeze the flames to death. A very cold and dense

carbon dioxide gas is released so that all oxygen is blocked, and the fire, with no oxygen to feed on, immediately dies out, no matter how combustible the material burning may be.

Tests have proved this extinguisher to be very efficient and even burning oil can be put out by its use.

Some Flower-like Animals of the Sea

BY WALDO L. SCHMITT

(Illustrations contributed by Yvonne Losh, New York City, by Permission of F. Schensky, Helgoland.)

THESE "flowers" of the sea (sea-anemones) have excited the wonder and admiration of mankind throughout the ages, and have even furnished poetic inspiration. Their beauty of form and color can scarcely be matched elsewhere in the animal kingdom, for, after all, they are animals. So zoologists have gone to the flowers for their comparisons and descriptive names. Hence we have the sea-anemone, the sea-rose, the sea-pink, the dahlia wartlet, the daisy-anemone and even a widowed anemone, one with long and drooping tentacles which, especially when at rest, resemble the pendant branches of the weeping willow tree. Even the larger groups in which these organisms are classified are called Zoo-phytes, Anthozoa or Zoantharia, all meaning animal plants or flowers.

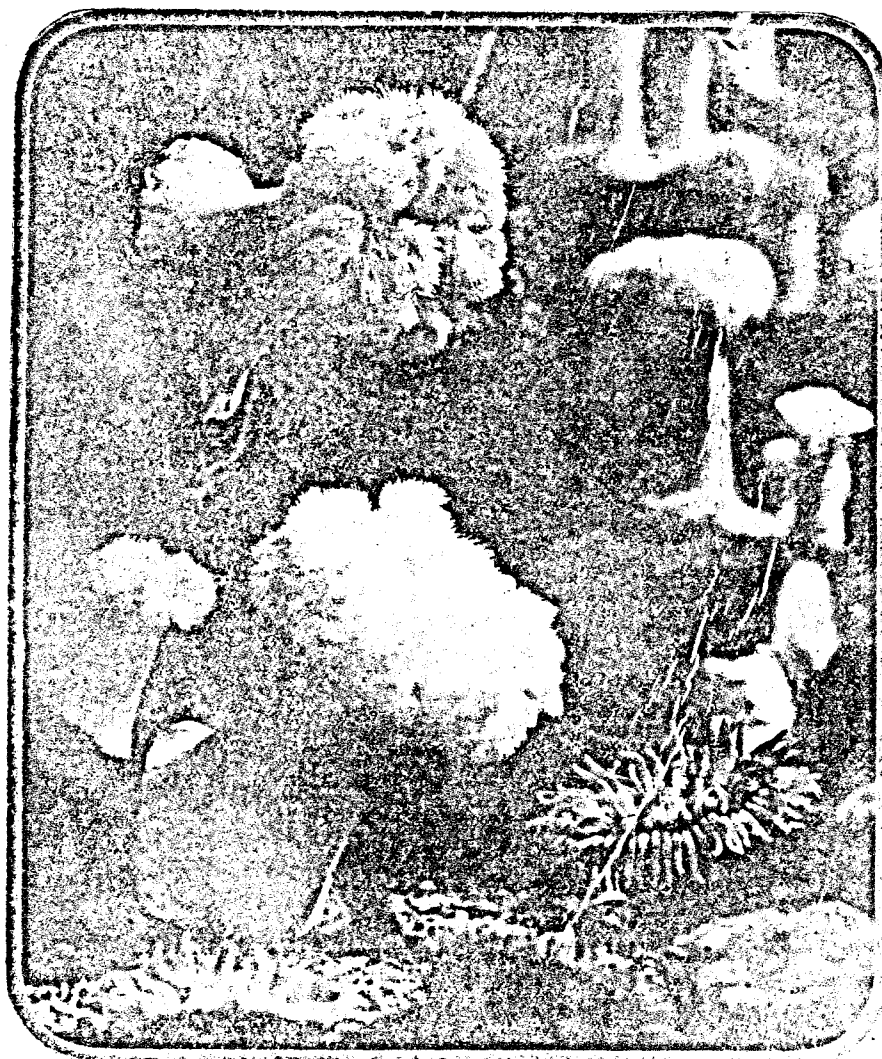
A mere description of the varied and marvellous display of color that greets the eye of those who have had the exquisite pleasure of observing these animals in their native haunts reads like gross exaggeration. Words fail him who would tell of the wonders he has seen. Instinctively one likens their profusion of color to the colors of the rainbow.

Miss Losh, who contributes the accompanying illustrations, and has seen these very compositions in life, exclaims: "'What beautiful flowers,' you would say, if you could see these marvellous crea-

tions in shades of rose, orange, white and brown, looking like huge carnations with thick stems. There are others, too, whose petals seem to have unfolded, making them look more brilliant and transparent. See, they tremble slightly, they stretch and search about as though they wanted to take hold of something."

"What marvellous colors they have. It seems as if they had been stolen from the rainbow. No florist could grow flowers with more perfect shadings and markings than these creatures of the sea, in their many

shades of red, violet, brown, yellow and green." Sea-anemones belong to one of the twelve major divisions of the animal kingdom, the Coelenterates, literally "stomach animals". They are scarcely more than that. Their body-wall surrounds a single sac-like body and digestive cavity combined. The mouth opening is situated at the centre of the disc, carrying around it the tentacles. It is connected



SEA-PINKS—ANIMALS, NOT FLOWERS

(*Metridium dianthus*)

These "seaflowers" are voracious feeders, catching with quickness and ease the hapless creatures which come within reach of their tentacles. They are also good to eat, and smell not unlike a warm crab or lobster, when prepared for the table.

with the stomach cavity by a short gullet. In most anemones the tentacles have a little perforation at the tip, as can be readily observed in the illustrations. Through these pores slender streams of water may be ejected with considerable force when the animal is disturbed.

These "seaflowers" are voracious feeders, catching with great celerity and ease the hapless creatures which come within reach of their tentacles. The tentacles are not only sticky with a secreted mucus, but also richly ciliated, being furnished with tiny, mobile hairs, or lashes, always beating toward the tentacle tips, so that when food is not being taken, all foreign substances or particles are waft-

ed away from the body. But when stimulated by the diffusion of the juices of food, or the contact of food material or prey itself, the tentacles turn inward, and point toward the mouth opening.

The matter of securing food is hardly so passive an act as would appear. As is

characteristic of "stomach animals," the tentacles are richly provided with nettle-cells, little trigger-actuated mechanisms, as it were, consisting of a tiny sac filled with an irritating fluid, that has the power of benumbing the animals that constitute the prey of the anemone, and severely stinging larger ones. Within the sac is coiled a slender, hollow thread, often barbed. Projecting from the outer surface of the nettle-cell is a tiny hair like process or trigger, which when touched discharges the coiled thread, which has considerable penetrating power, and voiding through it the fluid contents of the sac. The sting or burn of this poison charge is familiar to most of us who have bathed in waters infested with sea-nettles.

Thomas Jones in his *Aquarium Naturalist* tells

of a more decisive proof of the potency of these nettle-cells, than that of placing the tentacles in contact with the skin for a few seconds. He suggests biting one of the tentacles of an anemone between the foreteeth, applying at the same time the tip of the tongue to the part bitten. The taste is described as something between that of a capsicum or red pepper, and a red-hot poker.

A further means of defence and offence is at hand in most anemones in the shape of long gelatinous coated threads called acontia projected at times with great rapidity through the imperceptible openings in the body-wall. These threads are even more plentifully supplied with nettle-cells than

the tentacles, and enable the anemones to overcome fish and crabs often of relatively large size.

We usually consider these animals as more or less sedentary organisms, but many of them are not quite so immobile as we are prone to think. Dr. McClelland, while studying some animals in



MAN HAS ALWAYS ADMIRER THESE SEAFLOWERS

Partially expanded Sea-pinks having various color phases. Those in the foreground are Dahlia Wartlets

marine aquaria, noticed that some specimens of *Metridium*, after being placed on the bottom of an aquarium, would creep up the side of the glass to a more favorable position. He likened their method of progression to the ordinary creeping of a snail, consisting of a succession of waves travelling across the pedal or basal surface from behind forward. In the anemone these waves are larger and not so rapid or regular as in a snail. A wave required about a minute to traverse the foot of the anemone observed, and before it disappeared another had commenced. He "threw a number of anemones into an aquarium to observe their actions. They threw out acontia which caught hold of any solid object near them and contracted until some portion of the foot touched the object and caught

hold. One anemone sinking to the bottom and resting on its tentacles contrived to right itself by suddenly contracting and expelling water from its mouth. I observed this once or twice subsequently, but think it a coincidence, rather than a common reflex."

There are, however, some really sedentary forms like *Cerianthus*, which burrow in the sand and mud. There they live within tubes of their own construction, and for this reason they are exceedingly hard to secure, as usually but little more than the expanded "flower" extends above the surface of the bottom, and this upon approach is instantly withdrawn into the buried tube. These, Prof. Kingsley remarks, are "thick felt-like tubes of mud and sand agglutinated by the numerous glands in the body wall and by entangled nematocysts" (nettle-cells).

Our American *Cerianthus* grows to a considerable size, specimens in excess of eight inches in length being recorded. The body is a dark chestnut brown, pale bluish just beneath the tentacles; the oral disc pale yellowish brown, as are the marginal tentacles, the longer of which are barred transversely with six or eight dark-reddish brown spots.

Metridium dianthus (Ellis), the "sea-pink," is possibly our most beautiful anemone. It certainly is our most showy one when fully expanded. Certain parts of the ocean bed, of course near the shore, are simply covered with them, and in regions where it is abundant it is very common on piles. The species is rather widely distributed, occurring on the coasts of Europe, and North America on our East coast from the Arctic to Cape Hatteras, and

on the West coast from Alaska to San Francisco. It may attain a height of six inches and a diameter of three. In color *Metridium dianthus* ranges from the pure translucent white "as if arranged in the finest Coan vestments," through cream, flesh, salmon-red, pale orange, various tints of red to a full minimum-scarlet, and shades of brown from warm umber, or fawn-color, to dingy blackish olive. The tentacles generally are of the same color as the column, except in the olive and brown

varieties, where they are sometimes almost wholly "pellucid white".

The dahlia wartlet, *Urticina crassicornis*, or the thick-horned Sea Anemone, as it is sometimes called, though usually not as tall or high, has a greater expanse of "flower," often of five inches, or more, in the larger deep-water specimens. The surface of the body is covered with more or less irregularly scattered adhesive warts, hence the name wartlet, to which, under natural conditions, all manner of small stones, sand and shell fragments adhere, rendering the animal most inconspicuous when contracted. Sea-anemones are not always the beautiful showy things we see pictured here. When disturbed by the recession of the tide in the case of forms attached, or living above the low-tide mark, or by a jarring of the substratum to which they are attached, or by a sudden attack or rude touch, they contract to an amazingly small fleshy lump, most inconspicuous, and often disappearing completely from sight as in *Cerianthus*, and in the dahlia wartlet, and others when attached to rocks below the surface of the sandy or gravelly bottom. Such a contracted specimen of *Urticina* is



THESE FURNISH POETIC INSPIRATION

It is no wonder that these beautiful Sea-pinks have been pictured in everlasting poetry

mones are not always the beautiful showy things we see pictured here. When disturbed by the recession of the tide in the case of forms attached, or living above the low-tide mark, or by a jarring of the substratum to which they are attached, or by a sudden attack or rude touch, they contract to an amazingly small fleshy lump, most inconspicuous, and often disappearing completely from sight as in *Cerianthus*, and in the dahlia wartlet, and others when attached to rocks below the surface of the sandy or gravelly bottom. Such a contracted specimen of *Urticina* is

attached to the rock above the expanded *Cerianthus*. Gosse calls the colors of the dahlia wartlet very sportive, saying that "scarcely two specimens can be found exactly alike. The body may be dull green, streaked and flaked with crimson with pale grey warts, and the disc or 'flower' glaucous olive with conspicuous scarlet radial bands edged with white, proceeding from each outer tentacle in pairs, which curve around the foot of the tentacles of the higher rows, and are lost at various distances from the centre; those pairs which enclose the inner tentacles extend farthest and are most conspicuous." These bands are highly characteristic of the species and can readily be seen in the head-on-view here given of it. The tentacles of this color phase are a "pellucid light brown, with a band of opaque white across the base, which frequently stretches a little way up each side; a broad band of crimson surrounds the middle, bounded below, and sometimes above, by a narrower band of subopaque white. All of these bands are undefined, and are often rendered subpellucid by distension." The mouth is generally tinged with crimson, with gullet and stomach light grey. Again the body and disc may be a dull crimson, with the radial bands and central region more brilliant than the rest, with either pellucid white tentacles having conspicuous bands of opaque white, or crimson tentacles, with purplish bands. Yellow, straw to apricot-colored specimens also occur, while the generally very large deep-water specimens usually seem to have lost all color, being a semi-pellucid dusky grey.

The widowed anemone, *Sagartia viduata*, called in England the "snake-locked" anemone, has a ground color of "light buff, sometimes merging into a warm fawn, or wood-brown, at others into a flesh-hue or even pale scarlet. This is marked with longitudinal bands of paler hue, sometimes almost white; the bands being equal to the in-

terspaces. As these bands approach the base, they become more defined, and the contrast between the alternate dark and light hues is beautifully distinct, especially as they are separated by slender jagged lines of very dark brown. The whole upper parts are freckled with numerous brown dots. The disc is a dull whitish-grey covered with a regular speckled pattern of deep brown, or blackish, and lighter greyish brown." The tentacles are translucent grey, marked on each side with a line of dark brown running through the whole length. At times, the tentacles assume a distinctly nodulous appearance, an evanescent condition that appears and disappears at irregular intervals. The name "snake-locked" refers to the very snaky appearance of the tentacles of the active anemone. In this species, they are very numerous, upwards of two hundred in number. *Viduata* ("widowed") was the name first conferred on it by O. F. Müller, because of the white and black lines, which seem to have been remarkably contrasted in his original specimen. When at rest, after a satisfying meal, the tentacles droop like the branches of a weeping willow tree.....

Anemones, because of their more or less sedentary habits, can endure long periods of fasting, and withal are very long-lived. It is said that Sir J. Dalzell kept one alive for over twenty years, and that he had another, apparently of equal age with the former when taken, that lived for thirteen or fourteen years, in his possession.

From Faber's *Fisheries of the Adriatic* we learn that "all sea-anemones are edible, and are to be met with in large quantities in most fish markets, such as Marseilles, Cete, Bordeaux, Bayonne, etc.," and that the "green" anemone "occasionally appears in the markets of Trieste and on the Coast of Istria where it is caught near the shore on stony and sandy beds; it is sprinkled with flour and fried in oil....."

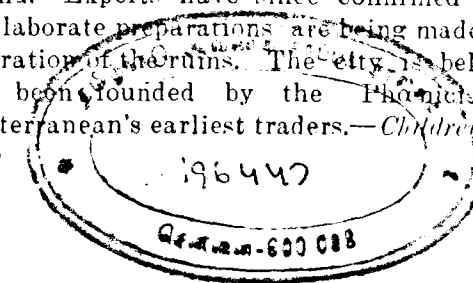
—Nature Magazine

A City Under the Sea DIVER'S FIND OFF TUNIS

Germany has her legends of a sunken city under the sea whose bells are heard at sunset, but the sunken ruins of Carthage under the sea off Tunis have actually been filmed from an aeroplane!

Now the Director of the School of Oriental Studies, Sir Denison Ross, brings home the story of the discovery of another submerged city, this time off the most southerly part of the Tunis coast, near the island of Jerba, which some people

identify as the home of the legendary Lotus Eaters. A native diver was looking for rock fish when he saw below him the walls of a city. He dived and brought up a souvenir of some kind as evidence of his find. Experts have since confirmed his tale, and elaborate preparations are being made for the exploration of the ruins. The city is believed to have been founded by the Phoenicians, the Mediterranean's earliest traders.—*Children's Newspaper*



The Chronicle of a School-boy

(Continued from P. 181)

CHAPTER III

THE Clan of Wise Fowls met last night and took in two of the new fellows. We had to hurry it rather, for fear our new recruits would falter in their purpose; all the rest of the rotters have gone over to the enemy, and are as keen on assignments as good little boys ought to be. Even the Peacock has been getting half-hearted about it. He denies it, but he needn't think I haven't seen him, sneaking round with Dot Ferrers. Of course it is difficult, I'll admit, to plot a real, good rule-breaking adventure in a place where there aren't any rules to break, but the thing isn't impossible by any means. It's just rather more of a fag, thinking out some devilry for oneself, instead of having it suggested, all pat, by the rule forbidding it. Anyhow, it's up to me, I see plainly, to use my thinking box at once, or the Clan of Wise Fowls will soon be dead and a goner.

We found a stunning place to meet in, a jolly old cave in a hollow of the Downs, and the whole adventure went rippingly. I had bought some strong rope, and tied one end to my wash-stand, just by the window. We foregathered about midnight, without disturbing anybody—young Tomson sneezed once, but I told him I'd jolly well knock his head off if he did it again, and he didn't. Then we all shinned down the rope, the Crow and I coming last to make sure that none of the others funked. Tomson said the new rope had scraped his fingers raw, and he'd had enough, but we told him he had gone too far now to draw back. He is rather a young boulder, Tomson, but he has heaps of pocket-money and is fairly docile under right treatment. He will be useful to run errands and do spade work, and we have named him the Sparrow. Biggs has more of the right stuff in him; he is henceforth the Hawk.

After escaping by the window, we still had to get over the garden wall—no going out by the gate, as the Lodge Keeper would have heard us draw the bolts, even if it weren't locked. So we had looked out a place where the climbing was good, and managed all right by standing on each others' shoulders, as a help to the weaker climbers. I got a rotten bruise on my collar-bone though, where the Crow kicked me in jumping off, and the Peacock let himself down the other side into a clump of stinging nettles, which are no joke to bare feet. However, his groans were a warning to the rest of us to slide further along the wall, and we

had better luck, and found some Dock leaves handy to rub on the sufferer. So we trailed off into the dark, after lighting the lantern which was difficult owing to the wind.

The meeting was top-hole. Of course, I can't commit its ritual to paper, so I will only remark that it is just chock-full of thrills—real nervy ones, too. The Sparrow was badly scared, but he perked up afterwards, when it came to the feasting part. Jam puffs and Ginger ale taste good, I can tell you, in a cave at 2 A.M.

Going back we had a beastly job getting over that wall again, and the Crow smashed the glass of the lantern by bumping it. He'll have to pay for the new one himself. A fellow can't be Grand Twinkler for nothing. I have to spend lots on paper, myself. Also Ferrers' dog scented us, and started barking as we were climbing the rope. Luckily no one seemed to take any notice, but I see we had better square that dog, next time. It is rather a jolly retriever and quite friendly, but whether we can bring him to the point of recognising the step of a friend in the dark, and holding his tongue, remains to be proved. If so, we can make a Clansman of him; if not we can perhaps give him a little something to keep him quiet—a sleeping draught of sorts, not strong enough to hurt him, of course.

Now for the plan of campaign, as settled last night. Point number one is that we're all sworn to distant civility, and nothing more, to the Staff. There must be no softening in that respect, and any fellow who shows signs of it will be fined by the Clan—besides other possible penalties of a personal nature. Point number two is that we enter into a conspiracy to get assignments done by a co-operative method, with the minimum of fag to ourselves, but sufficiently to blind the eyes of the authorities to our real activities. You see, I don't want the Dad to get wise to what is going on here and take me away, as it's quite a jolly place, taking it all round. So that means we've got to make a show of doing some work. I'll explain this assignment stunt, just to show the difficulties that have to be got round. You'll remember that, last month, I said that we didn't mean to apply for assignments; pottering around that carpenter's shed was all right, but we weren't going to ask for work. However, as I had twigged, the matter was not left entirely to our choice. After a week, the old

Doctor called us in, one by one, for a pleasant little chat; I went first and he asked me how I was getting on, whether I felt at home, etc., etc., like a long-lost uncle, in holiday time. But then he came to grips, and asked when I was going to start work and make a time-table. I told him that I had understood it was a matter of choice in this School whether a fellow worked or not. "Oh no," he answered, as cool as you please, "it is largely a matter of choice at what you work, and how you do it; but, of course, everybody works here at something, or what would be the use of coming here at all? The question is what do you want to do?" Of course, I wasn't green enough to tell him that, so I just said, quite respectfully: "I think, Sir, my Father wants me prepared for Cambridge; I was on the Modern Side at S. Andrews." "Oh," he said. "And you haven't yet developed a will of your own, then?" That made me a little hot about the collar, you'll understand, and I did some quick thinking as to something I could state a preference for. Sums are fairly easy to get done by other fellows, and are not easily detected if copied with a few artistic changes of style, so I up and said, "Please, Sir, I like Mathematics." "That's good," he said, "You had better go to Mr. Brown to-morrow, for a month's assignment, and if you get it done earlier, take it in to him and get another. You can work your own way at it and take your own time, but, of course, you will have to satisfy him about it before he will give you another. By the way, you have done some satisfactory work in those book-shelves for your study. I looked in yesterday afternoon and saw them, and Mr. Holt says you did without much help." I felt rather a fool—who would call that sort of thing doing work? So I muttered something or other, and he went on: "If you feel disposed to some science, as a change from perpetual Mathematics, I advise you to apply to Mr. Wilson at once for his assignment, as I happen to know that some fellows are arranging a jolly excursion for next Wednesday, and you could join on."

So I came away, and gave a hint to the other two as to the line of questioning they were to expect. The Crow decided that he'd be for Science, as long as there were excursions in the air, at any rate; and the Peacock wants History, because of rather a jolly Pageant some fellows had acted the Saturday before. The old Peacock rather fancied himself as Richard Cœur de Lion, or something equally classy, I fancy.

Well, I got let down over that Mathematics. The

Brownie gave me a printed card, with the pages to cover in text-books, and simply thousands of exercises to work. But I had already marked a few bright youngsters who seemed to enjoy that sort of thing, and I made them show me their old exercise books, so the thing was quite simple in appearance. But I found where the catch lay when I took in the work to Mr. Brown, for the blighter set me down to do a test there and then, under his eye, of some of those very exercises that I had copied so beautifully; and when I couldn't remember the hang of them, he just gave me back the same assignment to do again. But the funny part of it was that he didn't row me. He just said: "You will find it doesn't help you much to copy, Tracy. It is just a waste of time, and rather a sneaking sort of thing to do, if you think of it." That was all, and it made me feel rather small for a moment. But, of course, it's all rot to call it sneaking. All is fair in love and war, and it is natural for boys to be at war with Masters. I'm not a sneak, anyhow; any of the fellows could tell him that.

As to the Science assignment, it included some rather jolly things with stinks in the Lab, and there were the excursions too, chopping into the chalk of the Downs for fossils, and observing the lay of the land for a survey. The other fellows wouldn't let me in on these unless I did some of the grind in preparation for it, so some how the things got done. The Peacock says I've caved in there, just as he wants to do over History, but, of course, as I tell him, the principle that we're standing for is to jolly well please ourselves, and refuse drudgery, and we can afford to make one or two exceptions to our general rule. Only we mustn't overstep the line, as he is inclined to, I tell him; it is not only the History Pageant that attracts him, but he puts in a lot of time in the Studio now, being a dab at painting and drawing.

Well, now we come to the conspiracy. How can we circumvent those dashed assignments, so as not to be kept back everlastingly at number one, and eventually returned to our fond parents? We have decided that we will all take the same subjects—all the Clan, I mean—just a fair average set, the least that will satisfy our fathers, then we will keep note books in common, and when one of us has collected all the information wanted on any one of the lines, he shall spoon it out to the rest, to be memorised. You see, the rotten part of it is that here they don't give you proper lesson books in History, Geography, Grammar, French and so forth, but just give lists

of books in the library, where you have to spend hours looking up answers to all sorts of questions, and making up notes on every famous old blighter that ever lived. So it will save a lot of time if each of us takes a subject to work at, and that means doing little more than one fifth of the total, for it won't take us long to cram up the facts just before giving in the assignment. Anyhow, we shall see how it works.

I forgot to say that the School Regulating Committee met a few weeks after term began, and one or two regulations have since been posted upon the Notice Board, one of them prescribing hours for

study, during which all are requested to be as quiet as they reasonably can—not silent though, for chaps often work together here, and no one seems to mind. Masters sit in the different rooms, to help when wanted, but there isn't often a lecture or regular class in anything. The election for this Regulating Committee was rather fun, proper canvassing of votes and all that. Some of the boys elected are quite small chaps. I wonder what they do when some of their precious regulations are ignored. We shall have to find out.

H. V.

What is Wireless Telephony

Wireless telephony is the term used in connection with the transmission of the human voice, or music, through the ether by means of electromagnetic waves propagated by wireless apparatus.

The first experiments of any practical or commercial importance were made upon the introduction of continuous wave transmitting apparatus, but it was not until the advent of the thermionic valve as a means of transmitting that any great strides were made in its development.

In wireless telephony the radiated waves may be considered to consist of two distinct kinds—the carrier wave, which forms the direct means of communication and may be said to take the place of the line in ordinary wired telephony, and the modulated wave, which actually conveys the modulations of the voice or music. The modulated wave is superimposed on the carrier wave by a separated circuit embodied in the transmitter and generally by another valve, known as the modulator valve.

The actual speech modulation is primarily obtained by means of a microphone. Up to quite recently the microphone in use for wireless work was identical in general principles with the standard instrument used for ordinary line telephony, but while that instrument is reasonably good for speech transmission it is by no means a faithful recorder of music, chiefly owing to the loose carbon contact between the granules and the inertia of the diaphragm. The microphone most commonly in use to-day is an electro-dynamic instrument, having a light coil of wire instead of a diaphragm.

America's Lead

It is undoubtedly to America that credit must be given for the introduction of the broadcasting of wireless programmes. This was due,

in a large degree, to the ease with which residents in the United States could obtain licences for using wireless transmitting apparatus. It soon became evident that broadcasting was an ideal medium for advertising, and in a very short time hundreds of broadcasting stations sprang into existence mainly for this purpose, owned and controlled by large commercial enterprises. Events in America developed with such rapidity that it soon became a matter of the greatest difficulty to be able to select any one broadcasting station, for there was no adequate control of the stations and no great care was exercised by them in keeping to the allotted wave-length. This resulted in a chaotic state of affairs, and legislation quickly became a matter of urgency.

A study of the conditions in America was made by interested firms in this country, the outcome of which was the formation of the British Broadcasting Company. Previous to this, the only really high-powered transmissions were made by the Marconi Company from their experimental station 2 MT, near Chelmsford. These consisted of half-hour transmissions of speech and music on Tuesday evenings.

One of the greatest achievements in the early development of broadcasting in this country was the relaying of opera from Covent Garden, and, at a later date, the relaying by land-line and radiation simultaneously from all stations of the same programme. A still later development of simultaneous broadcasting was the relaying of American transmissions picked up originally by wireless, relayed by land-line to all stations, and thence rebroadcast, so that all listeners-in, whether using crystal or valve receivers, might receive them at will in a similar manner to the ordinary transmissions.—*Manchester Guardian*

Palace of the King of Kish in 3000 B. C.

FASCINATING interpretations and revelations of the struggles and vanities, temples and palaces, of men and women who, around 3000 B. C., built a mighty Dual Empire in the now barren sands of nether Iraq (Mesopotamia) are contained in a report to Stanley Field, President of the Field Museum, made public, from Professor S. H. Langdon of the Field Museum, Oxford University Expedition, excavating at Kish.

Professor Langdon discloses the vastness of the ancient city before it was buried by the desert. He describes in detail the recently discovered "Palace of the first Kings of Kish". This, he says, covers three acres, with "stairs and platforms, flanked with chambers, leading to adjacent Temples of the Earth Goddess and Mother Goddess". From the art works, throne room, baths, and even women's boudoir jewels and ornaments, he then conjures up a picture of these long-forgotten peoples.

Both the beautiful and the homely are reflected in the relics described. These mementos, according to the report, ranged from vanity cases, hand mirrors, and a "beautiful silver statuette of an elegantly dressed lady found beside her clay coffin," to a fish hook, cunningly shaped, and toy play dogs of children's nurseries.

Professor Langdon's report of the Expedition, which is jointly financed with Oxford University, for the Field Museum, by Captain Marshall Field, follows, in part:

"The Sumerian Palace, the greatest and oldest royal residence of ancient times, has been completely excavated. The massive ruins of the ancient Temples of Kish, with their two stage towers, are in the background. The fine alcoved court walls have appeared with the oldest flight of stairs ever discovered, leading from the outer court to a vast platform flanked with chambers and leading to the Temples of the Mother Goddess and Earth Goddess a few rods to the eastward. On the northern side of this court we found a long wall of columns, flanking the southern Palace wall, a complete revelation in ancient architecture.

Panels Picture Ancient Peasants

"The workmen came upon a room originally decorated with inlaid slate panels, representing the rural life of the early Sumerian people, of the period 3000 B. C. It is impossible to reconstruct the panels from the numerous fragments, but it is evident that this royal chamber was decorated with a long series of slate panels inlaid with figures of domestic animals in white limestone, so as to portray the

pastoral life of the peasants. One of the walls of this chamber was decorated with a series of panels devoted to a victorious war. Fragments of figures representing Sumerian prisoners with hands bound behind their backs and led captive before the Kings of Kish were found scattered on the floor, evidence of the ruthless vengeance meted out to the royal city when its Kings finally lost the Imperial Power.

"As the work advanced into the greater halls and chambers of the Palace a remarkable discovery was made. On the western side of the Palace was found a great hall 700 feet long by 30 feet wide, in the centre of which stood a row of columns five feet in diameter, and a great water basin built into a low table at the western entrance. It is obvious that this huge Hall of Columns, was the imposing entrance of the royal throne room, and that the great basin was placed there for ablutions for those invited to enter into the inner Palace. The entire Palace was fortified by two thick walls, between which ran a moat provided with drawbridges.

"This Palace covers a ground area of about three acres and is the oldest and most magnificent specimen of early Sumerian architecture which has been excavated in any land. It forms at present the only well-preserved building constructed entirely of plano-convex bricks, employed by the first masons of antiquity, and the use of the columns decoration before 3000 B. C. completely revolutionises the history of architecture.

"But more remarkable are the objects found this season in the burials of this Palace. A rich harvest of beautiful copper utensils, implements, gold jewels and ornaments of precious stones rewarded the work here. These include a fine copper hand-mirror of a woman, about 3000 B. C.; a copper knife, spinning wheel and distaffs used by spinsters of this period. Ornaments of the ancient Sumerian ladies' boudoir are unique and unparalleled by previous discoveries.

Manicure Sets are Found

"The unique discovery from female burials are copper vanity cases containing manicure sets. They consist of pincers, tongs and sometimes nail-files. Paint dishes and remains of brushes for coloring the lips, cheeks and eyebrows were discovered last season. Obviously, the women of the leisured classes at Kish from the earliest times were models of fashion and arbiters of modes and elegance. This is manifest again by discoveries in the city ruins of the age of Nebu-

chadnezzar, where a beautiful silver statuette of an elegantly dressed Babylonian lady was found beside her clay coffin. Photographs of this fine discovery are not yet accessible, but they shall be issued to the public as soon as the object can be minutely studied. We also found additional copper hairpins with lapis lazuli heads.

"Specimens of magnificent pottery with inlaid designs were found. The designs are made by filling in the etchings with a thick white paint. Nearly all the graves yielded the usual cylinder seal carried by all important Sumerians and Babylonians. Early shell and marble seals carried on the wrists by a string and used for sealing clay documents. These are all of the period 3000-2800 B. C. Three of them show hunting scenes, combats with lions and shepherds protecting their goats and gazelles from beasts of prey. One of them shows the well-known scene of Gilgamesh after he has slain two lions. Of the thousands of seals now known the designs are never exactly alike. This was done to prevent forgery of a man's name, for the impression of his seal stood for his signature.

Razors and Sickles are Dug Up

"A great many copper razors and sickles have been found this season, but the fine shell beaker, with human head, is unique. For the history of zoology the discovery of several small children's toys representing horses must be emphasised as absolutely revolutionary. These were found in the Palace and belong to a period about 3000 B. C. One of them is a top representing a man riding a horse and was found with a fine hollow

toy goat which contained a pebble; it is a child's rattle. It has been supposed that the horse was known in early civilisation not before 2200 B. C. But this discovery proves that this animal was well known in the times of the Kings of Kish, certainly before 3000 B. C. The boys those days played at war like all healthy boys of every age, as evidenced by a toy war chariot, with box under the driver's seat.

"A great oven kitchen was found attached to the Palace on the eastern side. In one room of the Palace was found an open fireplace with ruined hearth of plano-convex bricks.

"One find was, beyond doubt, a fishhook. Fishing with hook and line was supposed to be practically non-existent in Babylonia and Assyria, and this is, in fact, the explicit statement by writers on the history of fishing. So this is the oldest fishhook ever discovered and the evidence for the discovery of fishing by hook and bait before 3000 B. C.

"Scores of Babylonian houses, many of which contained grammatical tablets, were excavated this year, containing the exploitation of the library mound discovered by the writer last season.

"The ruins of Kish are so gigantic and extensive that we must congratulate ourselves in having located some of the most important buildings and made discoveries of undoubted and far-reaching importance. The Director of the Expedition wishes to thank the Field Museum publicly for their generous and loyal support."—*The New York Times*



Taking the Bait and so Photographing itself: An Astonished Raccoon "Pressing the Button".

A Symposium of Scouting

THE Chief Scout of the World is "back in harness once more". Scouts and Scouters will be interested to know how he took this period of total cessation from work. "It was pure slacking, and though for a bit (when I had got into the way of it) there was a sensation of relief, yet I could not help feeling the guilt each night as another day passed without profit to anyone. Nothing accomplished, nothing done, does not earn a night's repose. It is Purgatory."

In an address to parents, he tells them that the success in life of a youngster largely depends on his upbringing and character, and that character cannot be taught to a class in a school. "The Boy Scout Movement has been expressly designed to meet this want," and, in the course of its existence, "it has proved its ability to capture the boy and, through activities which appeal to him," develop in him

1. character and intelligence, 2. health and physical development, 3. hobbies and handicrafts, and 4. unselfish service to others.

It is of great importance, he tells the officers of the Movement, to develop the qualities of patience and self-elimination. Scouting, according to him, is a movement and not an organisation. A movement is not a movement, says Mr. F. G. Pearce, in the July number of *The Boy Scout Gazette of Bombay*, "when it does not keep on the move". Unless Scouting moves with the times, with the changing needs of Youth, it ceases to be the Scout Movement, a living, inspiring thing. It stagnates and degenerates into an organisation. It is the idea of Brotherhood that serves as the inspiration, Brotherhood, not only towards other Scouts, but towards other men and animals also. Brotherhood in practice takes the form of service. This feeling of Brotherhood is best cultivated in outdoor life. That is why Scouting can never be a success without camping. Comparing Scouting to the old Aryan Brahmacharya training, Mr. Pearce tells us that the secret of the success in educating the Youth lies in the relation between *Guru* and *Sishya*. The Gurus of old lived with their Sishyas in quiet country places, entered into their daily lives, understood them and could hence help and influence them deeply. This brotherhood in practice, he says, the inner brotherhood, the spiritual reality, is the secret of success.

And here is the message of the Prince of Wales to the Scouts of South Africa bearing one more

testimony to this fact. "I take the very greatest interest in the Scout Movement because I believe that it is working on the right lines to train up a generation, which, imbued with high ideals and animated with the spirit of service, will prove themselves worthy citizens of our great Commonwealth. I believe the Scouts can materially contribute towards making the Brotherhood of Man a living reality, and so hasten the time when the Nations of the world will realise their essential unity and the utter futility of settling disputes by force of arms. You have a great country and tradition which are second to none. It is up to you to make yourselves fit to carry them on."

The following Ten Commandments of a gentleman three hundred years ago, published in the July number of *The Scouter*, may interest some of our readers:

Never speak of yourself.
Never repeat what you hear said of other people.
Be ready to take trouble even on slight occasions.
Be sparing of excuses and apologies.
Never claim precedence on a personal merit.
Tell the Truth.
Be neither Sir Oracle nor a buffoon.
Be generous with your money.
Be staunch to your friends, and bear the reputation for it.

Walk in the fear of God.

One of the great steps during the Chief Scout's absence has been the move forward in Rovering, especially "in those centres where the Scouters have made it clear that they recognise Rover Scouts as men and no longer as boys". Military drill for Boy Scouts is deprecated not because it is military, but because it is drill, the tendency of which is to repress all initiative and make the individual an automaton and a part of a machine. Scouts and Scouters are a band of brothers, elder and younger, whose aim is to develop initiative and a sense of duty from within. They are averse to filling the boys' minds with the visions of fighting. But with the Rover it is different. He is "capable of appreciating the difference between fantastic visions of military glory and the sober duty of every citizen to stand up and take his share of self-sacrifice and service for the defence of his country. This need not conflict with his sympathy for his foreign neighbors. It is our very hatred of injustice and of war that necessitates our Being Prepared in our own defence. Till better times come round, the defence of home, of women and

children, is still a prime duty of a true man and a citizen."

One very useful and much needed innovation has been made in Rovering. A series of questions is circulated among Rover Scouts who are asked to think over the answers to them. This is quite appropriately called The Vigil. Young men of to-day do not devote even a few minutes for turning their thoughts inwards, merely because they have not been taught the advantages of cultivating their mind. The Vigil is an attempt to introduce the habit of occasional quiet thinking as a definite part of a young man's character training. But, as Sir Robert Baden-Powell says, "it has to be done with discrimination, lest he becomes introspective".

The following address of the Rt. Hon. Mr. Baldwin to the Church Army has its inspiration to Scouters. "In this Country, we are perhaps awak-

ing more and more to the deeper spiritual impulses and their importance in the life of the country. You look in the most unlikely places for that spark of the Divine which exists in every human soul. You search till you find it, and then blow it into a flame, and so add one more testimony to the truth that Love alone is the conqueror in this world, and it is by Love alone that the Nations of the world can be brought into the paths of peace. The more that men give their lives to service, the more impossible the task they try to achieve, the more grace is given to them in the fight. The brighter their faith burns, the more they are able to radiate, among those with whom they work and in the world at large, the spirit of confidence and hope and happiness which the world to-day needs and desires so much."

C. VASUDEVAYYA

The Scout Spirit

BY WALTER CAMP

The Scout Spirit was in existence long before the organisation of Boy Scouts was ever developed, or even the original scout of our frontier and borderland was born. It has existed ever since the dawn of ages and has come down through successive generations of hardy men of initiative and adventure. However far back we go, we find ever a leader who is blazing the trail for his less adventurous comrades to follow. These men are the Roadmakers of History—they are the men who have led their generations along hitherto undeveloped paths of Progress, and have left behind them the guiding signs for others to follow the advance. This Scout Spirit is the work of the leader in every generation. He may be the leader to a broader civilisation or to great advances in art, literature, or the more hum-drum affairs of daily life. And if we examined into the history of such men we should find that that spirit actuated them even as boys and young men in the things which at that age bulked large to them. We should find them, the youths who devised new sports or a better way to play the old familiar ones; we should find them the ones who were never quite content with doing a thing in a certain way just because it had always been done that way. We should find them always looking for some better way. And so we see them developing and carrying that adventurous, high, resolute and undiscouraged spirit and ever becoming in any walk of life the Roadmakers for those who without them would never make any appreciable advance. It is the stories of some of these true scouts that I am going to tell you, for, how much better it is in life to be a Roadmaker than merely a Sign Post!

Think what Roadmakers Wilbur Wright and his brother were to the sport and science of Aviation. In 1902, at Kitty Hawk, they flew in a glider 622 feet. That was the first step on the trail. In 1903, they fitted in a motor and stayed in the air 59 seconds, but it took them two years to get a suitable motor, and they then flew 24 miles in 38 minutes. In 1908, Wilbur Wright went to France, and on the 16th of September, he flew there for 39 minutes and 18 seconds, and in 1909, on the 5th of July, Bleriot flew across the British Channel. And now the air has become almost a highway of travel!

It is an extraordinary thing in looking over records of our great men and leaders to find how many of them began on the farm or in the country, with all the benefits which the outdoor life gives.

Marshall Field was a farm boy and later a clerk in a dry goods store. James J. Hill was a country boy and clerk in a store. Thomas A. Edison began as farmer boy and then a newsboy on the train and later a telegraph operator. James A. Garfield was a mule-driver on the towpath. Philip H. Sheridan worked in a country store. Charles M. Schwab began as a clerk in a grocery store. Cornelius Vanderbilt began as a farm boy. Albert J. Beveridge was a plough boy, railroad laborer, logger and teamster. Robert Dollar was a cook's boy in a lumber camp.

No wonder that one becomes impressed by studying the history of these leaders, with the fact that the old Scout Spirit develops leaders and that the beginning in youth outdoors prepares, as does nothing else, for a strenuous later life.—*Bou's Life*

The Round Table Quest

THERE has come to our desk a visiting magazine, the pages of which contain much which is of interest to animal lovers. It is a little blue-covered magazine, *The Round Table Quest*, and it is published in the interest of The Round Table. This is a young people's organisation, started by some Theosophical leaders, but non-sectarian in its scope, making an effort to put before the young people all over the world the great motto of King Arthur: "Live Pure, Speak True, Right Wrong, Follow the King."

In living up to the high ideals of the true knight, girls and boys all over the world are pledged to help the weak, and included in this group are the speechless ones who need our thought and care so much. In the pages of this little magazine, which goes to each knight in many climes, we find an article by C. Jinarajadāsa, Knight Rājā, and we are happy to quote a paragraph from his splendid word to the children:

When we learn to say with the mind about everyone and everything—not only men and women, but also animals, plants, hills and fields, seas and mountains—"That is myself," then we shall slowly learn to feel with another. We shall be full of pity when he suffers, even if he is our enemy, and full of gladness when he is happy.

How true it is that when we cultivate in the young a feeling for animals we make a long stride in the path of humaneness.

On another page we find the remarkable story of Rolf, a German police dog, who lived in a large place with five other younger dogs. One day their owner heard loud barking, and, on going out to the garden, found Rolf standing guard over a piece of meat and refusing to let the other dogs eat it; and when it was examined it was found that it was filled with a combination of strychnine and ground glass, and the meat thrown over by a cowardly neighbor to poison the dogs had fallen near some flower pots, where daily the little boy of the house played. This act on the part of what we often consider dumb beasts is a particularly commendable bit of animal chivalry and courage.

How much the children reading that true story in *The Round Table Quest* will learn of the faithfulness of a dog!

And then there is a little story of an unwanted cat, for which finally the story ends happily. We were very much interested in an article which followed this cat story, written by a thirteen-year-old lad, Grayson Rogers, "Galahad" Companion in S. Alban's Round Table. This lad lives in California, where just now there is an effort to stamp out the cruelty of trained animals for the screen. Grayson Rogers' article is worthy of very special

mention in our columns. It is entitled "Cruelty to Animals" and at its head is the following quotation: "The ideal knight protects all who are weaker than himself."

The young writer describes the cruelty in training animals and the effort being made to abolish it. One sentence particularly stands out: "I think one way to stop cruelty displayed in motion pictures is to publish the facts of animal training of which people are ignorant." A worthwhile thought for a thirteen-year-old boy. A more mature mind has left on record the opinion, based on long observation, that if the man in the street could only be allowed a glance at the operations carried on within laboratory walls under the shield of science, there would soon be no more vivisections (and very few laboratories). This is true also of the training of animals.

The editors of *The Round Table Quest* are to be congratulated on the interesting little magazine and are to be further commended for its humane message which it carries to its young readers.

This brings us to the thought we have had recently of organising the Junior Auxiliary to the American Anti-vivisection Society, and an appeal for assistance in the formation of this has been sent to our members. We are urging all to send us names of prospective members between the ages of twelve and eighteen who will take to heart the advice of Wendell Phillips: "Young man, young woman, attach yourself in youth to some Unpopular cause and grow up strong in its service." Faraway junior members will receive each month a bulletin containing the humane thought for the month which we will give to our young members near enough to attend our meetings here. The boys and girls in High School all over the country are annually debating on vivisection, so that the cruelty of the practice is known to them. Why not teach them the thoughts of the thinkers of ages who have stood in our own ranks, so that they may stand from early days with men like Hugo, Ruskin, Alfred Russell Wallace, Tennyson, Tolstoi, Browning and many others, whom from their school books, not yet closed for them, they have learned to know and appreciate and honor? They will not be in bad company to-day, standing as they will with George Arliss, Ralph Modjeski, Minnie Maddern Fiske, Albert Peyson Terhune, John Galsworthy, the Duchess of Hamilton. So we urge our members to take this matter of forming a Junior Auxiliary seriously and send into our office names of boys and girls who will later fill in the vacancies in our ranks left by those whose life work is over.

—*The Starry Cross*

Indian Village Tank

BY A. JANAKI RAM

THE Village Tank forms an important component of rural life—at least in South India. Without it, perhaps, life in the village—to the womenfolk—would be too dull. For, here the acknowledged bureaus of information send out their Circulars and Gazettes Extraordinary, and, in contrast to some Government Offices, here information of any sort is supplied free of charge and even without being asked for. Here, the gossips freely give vent to their sharp and cruel tongues to spread malicious scandal against someone they dislike, and, half an hour after Kamalâ has divulged to a chosen friend, in utmost secrecy, a very confidential family secret concerning Vimalâ, the whole village knows about it, and Kamalâ feels triumphant.

But Vimalâ does not keep quiet; at the very next meeting at the village tank, she chooses some one more talkative than the rest, and gives out to her some "precious secret," concerning Kamalâ's sister-in-law. Of course, it is all fictitious, but the scandal started at the village tank spreads with amazing swiftness, and Kamalâ's sister-in-law's conduct forms the most important topic for days, until some more savory piece of scandal pushes this one into oblivion—but at least, Vimalâ has paid off her debt.

Thus, the meetings at the village tank—although much of the talk is harmless—form the source of most cruel gossip and scandal, and the more prudent and modest of women folk avoid coming to the tank, or, if forced to do so, they come very early, when it is still dark, and swiftly turn homeward.

But the less modest and more talkative women drop in one by one, or sometimes in groups, quite late after sunrise, and set about their business as leisurely as they can. They take a long time to clean and polish their vessels—for they work between intervals of talk; and even after leisurely filling their vessels with water, they do not start back yet—no, not till they have discussed a few families fully. Some there are, of course, who with a lesser taste for gossip and more work at home, finish their business quickly and swiftly turn homeward; but they have to pay heavily for such

culpable indifference towards the council of village gossips, for, on them are showered taunts of the sharpest kind, and they form the laughing-stock of the company.

All this while, a *Bairâgi* is seated in silent meditation under a spreading banyan tree, which sends its roots right to the water's edge. With his long beard and unkempt hair, and body besmeared with ash, he unwittingly scares away from the tank the village boys. But soon, he rises and walks away to his monastery near by, and, as the figure of the ascetic recedes further and further from the tank, a shrill whistle is heard, and soon a group of urchins come, running, jumping, and dancing, and hurl themselves into the cool waters, where perhaps they feel most at home. They swim, dive, and splash about, and ere long, the water, so quiet before they came, frets and foams even as a troubled lake.

The less courageous of them swarm near the bank, content in chasing the frightened ducks, while the more daring hold races and competitions to fetch the farthest lotus or reach the pillar that stands in the middle of the tank. Nearer the bank there are novices who, swiftly and steadily learning to swim, watch, with admiring eyes, the expert swimmers as they reach the far-off post, and long for the day when they, too, will do the same.

A few late comers now arrive to fetch water from the tank. They see the turbid water and the mischievous imps. The women scold the boys and, assuring them that a sound thrashing awaits them at home, fill their pots and turn back.

But now, one comes, in garments more costly and gait more stately—she is the wife of the village headman. She too sees the turbid waters and the cause thereof. Enraged, she shouts to the watchman of the tank, who, hearing her ladyship's summons, and guessing the purpose for which he is summoned, comes hurrying, brandishing in hand a thin long cane. The boys hurry to the bank and fly in all directions away from the watchman and leave the waters of the lily-studded tank to settle down in peace.

Dark as Krishna

Blessed is the man who drinketh deep of Sorrow's Cup;
Blessed is the man who mingles with the poor and weak;
Blessed is the man who takes as gifts defeat and loss;
Blessed is the man who calmly looks into the Face
Of God, the Silent One, in tragedy and tears;
For dark as Krishna is the path of Truth and Love.

An Automatic Secretary

Interviewing callers and answering telephone calls are some of the duties satisfactorily performed by a newly invented machine described by Truman Stevens, in February the *Popular Science Monthly* (New York). This device, Mr. Stevens avers, "performs, in a way that is positively uncanny, a variety of tasks ordinarily accomplished only by human hands and brains". We read:

It will take dictation like a stenographer. It will serve as secretary of a meeting or office conference. It will answer the telephone in the absence of the subscriber, report his absence to the caller, and take a message that it will repeat to the subscriber on his return. It will record perfectly a telephone conversation from both ends, no matter how far separated.

It can be used as a dictograph in criminal or other investigations. It can be hooked up to a radio receiver so that it will record automatically stock-market quotations or similar broadcast messages at the proper time. It can be put to any or all of these uses, or to any others that the ingenuity or necessity of the user may warrant, without change of mechanism.

In appearance this amazing apparatus resembles somewhat an old-fashioned phonograph, employing a wax cylindrical record, or the ordinary dictating machine to be found in many offices.

Like both of these devices, the new machine records conversations on a wax cylindrical record. Unlike them, however, the recording is accomplished not mechanically, but electrically, the sound vibrations of the voice being transformed into electrical currents in a sort of miniature radio transmitter, containing a vacuum tube and a complicated series of inductances.

These messages then are imprinted on the record, and are reproduced for the hearer by the usual phonographic process. Through the electrical system of recording, an excellent quality of reproduction is attained, the listener hearing the true inflection and tones of the speaker's voice.

Also it permits the use of a super-sensitive microphone, which enables the user to give dictation in an ordinary conversational tone from twenty feet or more away, and also causes the machine, when it is used for that purpose, to record every word of a conversation in which several persons are taking part, no matter in what parts of a room they are situated.

By means of auxiliary apparatus a magazine

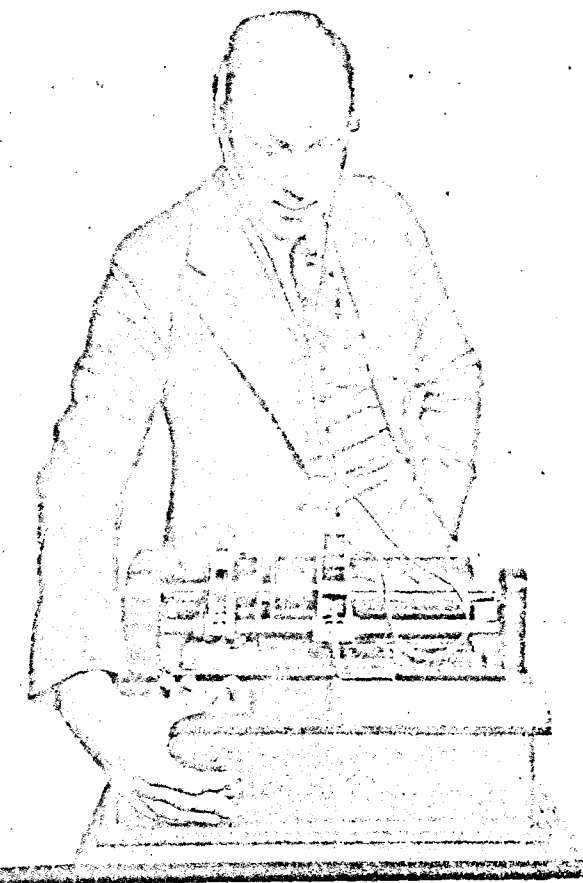
of records may be installed in the machine so that when the end of one is reached, the next automatically starts recording, thus permitting dictation to be given or conversation of any sort to be recorded indefinitely. Each record may be shaved about eighty times before it becomes too thin to be used further. The device may be operated for any of its many uses by either electric-lighting current or by a storage battery or dry cells, like a radio set.

When the device is employed as a telephone operator, a message suitable for transmission to telephone callers during the absence of the subscriber is imprinted on a small auxiliary record at the left of the large wax cylinder. When a caller obtains the subscriber's number, in the absence of the latter, this little record is set in motion by the current operating the telephone bell, and the caller hears something like this: "This is the office of Smith & Co. There is no one here at

present, but you may leave a message, or you may call again at 2.30, if you prefer."

Immediately after the delivery of this message, the machine is ready to record any message the caller may desire to give.

Used as the recorder of a telephone conversation, the machine starts working automatically the instant the call is put through, and imprints on the record every word uttered by either party. Brokers and others to whom repudiation of a telephoned order by a customer might mean a large financial loss, would find permanent records of their conversations of especial value."—*Literary Digest*



THE MACHINE TAKES THE MESSAGE

The subscriber hears what is said to him over the telephone in his absence. The accompanying article tells how it works.

Eliphalet Remington

WE have often amused ourselves with the thought that the names of Shakspere and Newton are not more familiar to mankind than the names of men whose sole contribution to human progress has taken the form of a sewing-machine or a pill.

Advertisement, which is something of an art, has hammered into the minds of men certain commercial names, which are now as familiar to human life as the sun in the heavens. Millions to whom the name of Aeschylus is strange and the name of Empedocles unknown, are perfectly at home with the name of a man who makes mustard, and the name of a man who manufactures motor cars.

But we did not smile when the news came from America that a manufacturer whose name is known from one end of the earth to the other had passed into the world beyond our vision. We did not amuse ourselves by comparing his almost universal fame with the quite limited fame of Keats and William Blake, or of Lord Rayleigh and Metchnikoff. Instead, a sigh of grief escaped our lips, and we wondered whether it might not be argued that this man, whose life was so full of strange vicissitudes, had made as real a contribution to progress as many a poet and statesman honored by the Nations.

At one time of his life Eliphalet Remington, the man who died not long ago, manufactured firearms. His rifle was famous throughout the world. He could not make it quick enough for the world's demand, and he and his brother became enormously rich. Fifty years ago they had the sort of monetary eminence in America now assigned to men like Rockefeller.

What did Eliphalet Remington do with his wealth? He set up no grand establishment, bought himself no yacht, paid no gorgeous visits to Europe. Instead he conceived of himself as a person directly responsible for the welfare of a university, the University of Syracuse, and he gave with both hands to this institution until, as the authorities now say, "he had nothing left for himself". Remington was a man who actually beggared himself for education. A quiet man, he loved books, honored learning, and sought to

benefit poor students.

His firm fell into difficulties. Other firearms came into the market. New inventions made the Remington rifle old-fashioned. In a state of insolvency Remington discovered that the world had gone past him. His firm, giving up rifles, then invented something new; in a few months, all the world was speaking of the Remington Typewriter, and many people who knew of the financial difficulties of this good man rejoiced to think that once again he was rich. But while the name of Remington became more famous than ever, and you might have seen typists at Melbourne and Sydney tapping at exactly the same machines which employed the busy fingers of typists in Glasgow and Newcastle, Eliphalet Remington was living in obscure poverty. Not for him was the reward of the Remington Typewriter. The firm of Remington must pay off its debts, the firm of Remington must fight the competition of the world, the firm of Remington must henceforth be established on foundations which would never fail; as for himself, he had his books and his clear conscience, and a heart that was grateful for the gift of life. The quiet man went on with his studies.

He sank deeper and deeper into poverty, but never complained. If everyone who used a Remington Typewriter had sent him a shilling he would have been a rich man. But he hid his poverty from the world and went on doing good in secret—as unobtrusive a man, in spite of his famous name, as you could find in all the world.

Then, to make the story perfect, the authorities of the Syracuse University came to hear of the poverty of the man whose benefactions to the University had made him a beggar. A meeting was held. The learned heads of the University allowed their hearts to get to work, and the last days of Eliphalet Remington's life were made "more comfortable" by the gracious charity of the University he had loved so well and served with such unwavering devotion.

He could have desired no better end. Learning held his hands as he closed his eyes on this earth, this school of the human soul in which he had learned a noble lesson.—*Children's Newspaper*

Service

Good, better, best
Never let it rest
Till the good is better
And the better best.

Duralumin, The New Wonder Metal

IN duralumin, the new metal invented especially for aircraft, lies the secret of the far-flying exploits of the ZR-3, or *Los Angeles*, and the *Shenandoah*. Trans-Atlantic flying, for instance, would be impossible without duralumin which, answering the airship requirements of strength and lightness for its ribs and hull, is stronger than wood and much lighter than steel, in fact, is about one-third the weight of the latter. One can lift with two fingers a girder of it that will support six men.

In *Popular Science Monthly*, Lieut.-Commander Fitzhugh Green describes duralumin as being an alloy of copper, manganese and magnesium, with about 94 per cent of aluminium, and as having 17 per cent greater "strength-weight" efficiency than a



INSIDE AN AIRSHIP SUCH AS THE
LOS ANGELES

The real miracle of the ZR-3 is its vast skeleton of duralumin. Every single element of the framework supports not only its own local weight, but contributes directly or indirectly to every other element in the entire ship. This photograph shows the fuel tanks in position.

good alloy steel, and nearly three times better than mild steel or half hard aluminium. It was first made by Alfred Wilm in Germany in the development of Zeppelins, but is now being made in England and America. The power at Muscle Shoals is now being sought by a large corporation to manufacture this metal for railroad uses.

Expressing the opinion that "duralumin is the most important single factor in bringing about the triumph of commercial airships," Lieut.-Commander Green asserts that helium would not mark such great progress over hydrogen were not its frail goldbeater's skin containers housed in a structure almost incalculably staunch. Both the ruggedness and the stanchness were wanting before the day of duralumin.—*Current Opinion*

Some Gallant Deeds

Here is a fine story of a little lad who saved a three-year old child:

All the joy-bells and hooters in Caterham and Reading, and all the dogs in Berks ought to be paying tribute to the One Person in the County Who Counts.

He is only a very little man, but heroism, like "guid gear," as the Scots say, may "gang into sma' bulk". For George Squire, of Cromwell Road, Catersham, who has leapt into fame at one dive, is just twelve years of age.

While amusing himself on the banks of the Thames at Reading George heard hysterical shouts from other children, and, looking round, saw a perambulator with its baby-occupant—Joseph Pannall, of Hemdean Avenue, Caterham—hurtle down the incline and splash into the river.

Without a moment's hesitation George ran to the spot, and the children around were further terrified to see him throw himself, fully clad, into the swiftly-running waters.

But their horror was turned to joy when this gallant little fellow, clutching his tiny burden eventually succeeded in bringing the child safely ashore.

The perambulator was afterwards recovered in mid-stream.

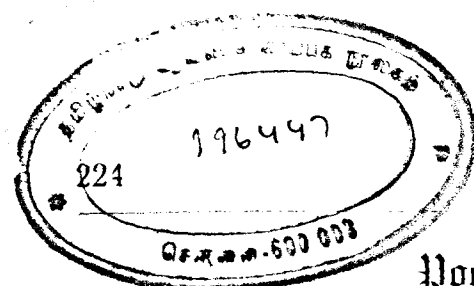
It appears that little Joe Pannall, who is three years of age, had been lifted from his pram by an elder brother and placed on the ground to play. Somehow he managed to climb back to the pram, which was thus set in motion.

He saved a life but could not save his own

A gallant rescue at the Warren, Folkestone, had a sad sequel.

A lad of about twelve or fourteen slipped into a pond and was in great peril of drowning, when Albert Copping (20), of Denmark Street, Folkestone, jumped in and pulled him out.

Copping unfortunately slipped back and sank. Another youth at once dived in, but was unable to save him. Copping's body was recovered later.



Poor Memory is Bad Management

ANY one's memory, no matter how faulty it may be, can be improved if he knows how to "play the game". It is usually management rather than the memory itself, that is at fault. This is the conclusion of Dr. R. S. Woodworth, of the National Research Council, who writes on the subject in Science Service's *Daily Science News Bulletin* (Washington). Dr. Woodworth illustrates with a story of a college freshman who once asked his advice. The boy's memory was so poor, Dr. Woodworth said, that he simply could not learn his lessons, no matter how much he worked over them. "I put him through some memory tests," says Professor Woodworth, "and found that his memory was perfectly normal. He had carried over into college his high school habit of simply reading his lessons in a blind, passive way. A long lesson in history he would read sometimes a fourth time, and yet when next day questions were asked, he had forgotten the answers. The fact was that he had never known them, for he had not analysed the reading, understood it or picked out the important points. It was a lack of good management rather than of power of memory." Dr. Woodworth advised him to read the lesson through once, then to review and analyse it mentally, and finally to consult the book again to check up his analysis. This procedure he found to save him much time and give much better results. We read further:

If you ask us what memory is, you see that it amounts to this: You do something all by yourself, which you originally needed assistance to do. If you remember a person's name, you can call him by name on sight without any assistance. When you first met this person you had assistance. Some one told you his name. Good management demands that when you have the assistance at hand you should so use it as to do right then and there, the very thing that you wish to do later without assistance. When some one has just told you the stranger's name, you should look at the stranger and call him by name, either aloud or silently, and so prepare to do this very thing at some later time without assistance. This is the principle of all sound memory-training.

Psychologists, after testing the memories of many people, are able to announce two very encouraging results. First, that nearly every one has more power of memory than he imagines, and second, that intensive training produces great improvement in memory. But it should be added, as a very important qualification, that training does not develop the general faculty of memory, but simply increases the power of doing the particular kind of memory job that is practised.

The first step toward effective memory-training, Dr. Woodworth tells us, is to decide exactly what sort of memory work you need. If you wish

to improve your memory for poetry, you must practise memorising poetry. If you wish to improve your memory for names and faces, you must practise connecting the name with the face. If you wish to improve your memory for telephone numbers, you must practise connecting telephone numbers with the names of subscribers. He goes on:

If you wish to improve your musical memory, you must practise memorising music. If your wife complains because you cannot remember much of interest from your day's experiences to enliven the supper table, what you need to practise is the taking note of interesting items as they occur and then recalling these when the time comes. Great improvement can be made in any of these memory jobs, by devoting time and effort to that particular job. No doubt an expert psychologist adviser could assist any one to improve his memory work, but an intelligent person can do much for himself, once he knows that he needs to train himself for specific memory jobs, and that the problem is one of management rather than of inherent memory power.

The first step is to see exactly what memory job needs to be perfected. The second step would naturally be to proceed to practise this particular job. But just here a very curious state of affairs often comes to light. The man who says he very much desires to improve his memory, yet finds it very irksome to work at the details of this particular job, is, in a way, indifferent or even unwilling to do this job well. He experiences an inner resistance that interferes with his progress.

If this seems almost an impossibility, consider once more the sad case of the man whose wife finds him very unsatisfactory as a provider of interesting news. Is this the sort of man who snaps up eagerly every bit of interesting gossip or happening, and who anticipates the pleasure of recounting his news at the supper table? Does he relish the job of gathering news items for feminine consumption? Possibly not. Quite possibly he is the kind of man who thinks this beneath his dignity. He doesn't regard this as his job in any big sense. When it comes down to the actual working of this job, he rebels against it. This inner resistance is going to interfere considerably with the improvement which he might make. The chances are that he never will enter into this new game heartily, and will never become a shining example of success in this sort of memory work; but if he can overcome his own resistance, it is in his power to improve. It has been done.

After this suggestion, which might come under the classification of "insuring domestic tranquillity," Dr. Woodworth repeats for emphasis his advice to those who want to improve their memories:

Poor memory is due to poor management rather than to an inferior faculty of memory. Any sort of memory can be improved if one discovers exactly what needs to be improved, and if one can play the game heartily."—*Literary Digest*

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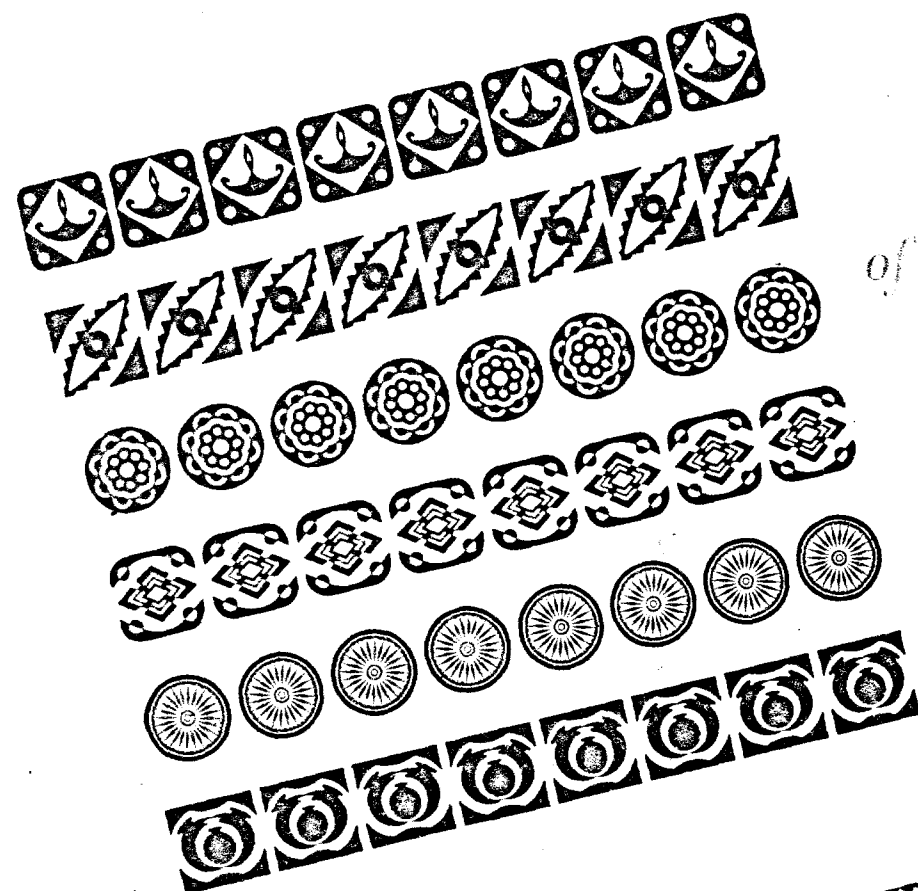
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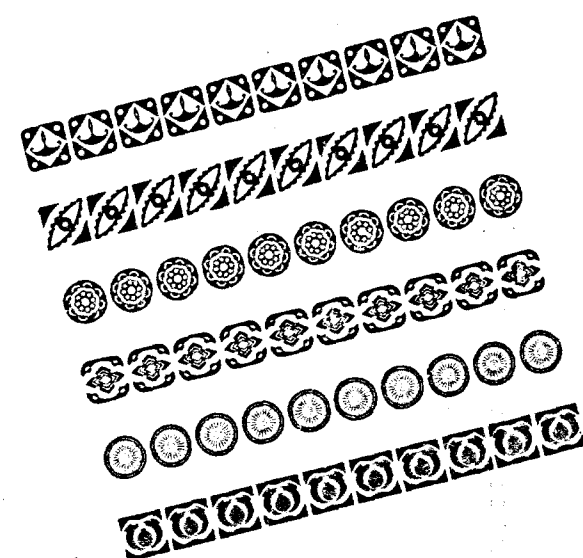


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