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MODEL POLITICIAN
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PANORAMA
THE PHILIPPINE MAGAZINE OF GOOD READING
Vol. XVII MANILA, PHILIPPINES No. 9

THE WORLD TODAY

The world today needs men who believe that this is a good world and who will work to make it a better one; men to whom honesty is not a policy, but their normal state of being; whose consciences respond to right and truth with the steadiness of the needle to the pole; men who have the courage of their convictions and dare to proclaim them though the heavens totter and the earth yawns; men who prefer honor to wealth, truth to sophistry, kindness to covetousness, modesty to vainglorіousness, service to recognition, humility to grandeur, usefulness to reward; men who have found their business in life and attend to it; who neither lie, shirk, nor meddle; who have a definite aim, go straight for it, and treat failures as stepping-stones to success; men who dare to think for themselves, to drink out of their own wells and eat their own sweet bread, earned by the toil of willing hands and brains; men who, surrounded by barnacles, bores, busybodies, fanatics, knaves, pests, triflers and wiseacres manage to maintain their faith in God and the high destiny of the human race. — *Coronet Editorial.*

■ The noblest Filipino in public life the Philippines has ever produced.

PRESIDENT OSMEÑA, MODEL POLITICIAN AND STATESMAN

"I have not come to you to promise you the moon, the sun and the stars... It would be childish of you to believe me if I made such false and empty promises... The people know my lifetime of public service and I hope you will give me further opportunity to serve...."

That was the shortest presidential campaign speech in the annals of Philippine politics, delivered by the then Commonwealth President Sergio Osmeña, Sr. at Plaza Miranda three days before the 1946 elections. The simple address was characteristic of the humble and silent man that Don Sergio was. It was the only campaign speech he delivered in his re-election bid in that first postwar balloting.

Yet he was an eloquent speaker, having been a journalist, provincial fiscal, governor, diplomat, speaker of the Philippine assembly and of the house of representatives, senate president protempore, vice president and president of the Commonwealth in the span of 48 years before that election.

Don Sergio was a contrast to the boisterous, self-praising, and vitriolic politicians of today. He believed in the dignity of silence, showed that there is majesty in modesty, and became famous for his tranquil personality and dignified demeanor.

In the early 1920's, when he was senate President protempore and Manuel L. Quezon was the senate president, two opposition senators assailed

Osmeña's character in the session hall. Democrata Senators Emiliano Tria Tirona and Teodoro Sandiko took delight in charging that Don Sergio, during the early days of the American occupation, came to town from his mountain hideout dressed as a woman to avoid capture by American soldiers.

To this vilification, Osmeña only smiled enigmatically. He was temporarily presiding over the session and he could have easily defended himself and crushed the attackers with the magic of his Castillan oratory.

It was Quezon who rose and effectively silenced Tirona and Sandiko. The senate president bared the now commonly-known fact that Don Sergio actively served General Emilio Aguinaldo's forces, editing revolutionary circulars and delivering vital messages across enemy lines. Quezon lauded Osmeña for courageously asserting the Filipinos' right to independence in the El Nuevo Dia, a newspaper founded and edited by the then 24-year-old Osmeña which practically became a revolutionary organ succeeding La Solidaridad.

In 1943, Don Sergio supplied contemporary world history with the noblest of character and greatest generosity ever shown by any statesman. He was then vice president of the Commonwealth government in exile in the U.S. President Quezon, whose term was to end automatically on Dec. 31, 1943, lay sick at Saranac lake and the allied forces were at the lowest ebb in war fortunes in the Pacific.

With characteristic self-abnegation, Osmeña sought to relinquish voluntarily and without fanfare his constitutional right to succeed Quezon. He silently urged the U.S. Congress, through President Franklin D. Roosevelt and Senator Millard Tydings, to pass a special legislation extending Quezon's

term for the duration of the war. Thus, Quezon remained President up to his death on Aug. 1, 1944. Then and only then did Osmeña assumed the Presidency.

Yet Quezon was Osmeña's off-times adversary for political supremacy. Don Sergio was the Philippines' first undisputed leader following the establishment of American rule in this country, a time when the nation was undergoing greatest trial in self-government.

Rising to national prominence as chairman of the first provincial governors' convention in 1906, Don Sergio became speaker of the first Philippine assembly in 1907 when he was only 29 years old. This was the highest position for a Filipino during that regime. He guided the nation in the exercise of political rights and paved the way for real independence. He nurtured Philippine-American relations while at the same time showing intense nationalism.

His nationalistic spirit and sound instructions to Filipino resident commissioners in the U.S., Quezon being one of them, led to the enactment of the Jones Law.

It was Don Sergio, Quezon, Rafael Palma and other statesmen who founded the Nacionalista party in 1906 with Osmeña as its first president. In 1922, a rift split the N.P., resulting in Quezon's assumption of the N.P. presidency and political supremacy.

Even in the first Philippine bar examinations of 1903, Osmeña and Quezon were rivals for the top places. Osmeña garnered second place with a rating of 95.66 per cent, scoring perfectly in two subjects (penal code and criminal procedure). Quezon came out fourth with an 87.83 per cent.

Don Sergio exercised political power with sobriety, grace and decorum. He restrained himself from compromising principles for political expediency and preserved democratic ideals by living them. That he refrained from regionalism and personal prejudice in the government was narrated by a fellow Cebuano, the late Senator Mariano J. Cuenco. The senator said:

"During those formative years of our national life, no Filipino could be appointed to the bench, to the cabinet, or to any other high office in the government, without first satisfying the high standard of public morality set and exemplified by Osmeña himself. When he occupied the highest magistracy of the land... Osmeña never abused his power or use his tremendous influence to favor members of his family, those of his wife, or fellow Cebuanos. On the contrary, to the disgust and disappointment of many a deserving Cebuano who could be ranked among the best minds in the country, President Osmeña's high sense of propriety restrained him from appointing fellow Cebuanos to positions in the government, because of his overpowering conviction that like the wife of Caesar, all his official acts should always be above reproach."

Friendship was one of Don Sergio's priceless treasures in life. Yet even with his closest friends, friendship ended where the interest of the country began.

As President running for re-election in the hustle and bustle of postwar days, Osmeña could have taken advantage of his high office and used government facilities and resources against his political adversaries. The U.S. was then pouring in enormous relief goods and aids in grants and getting ready to hand over $800 million in war damage

payments to the Filipinos. Don Sergio could have used this tremendous loadstone in sweeping the electorate and luring oppositionists into the ruling party.

But he restrained himself and refused to stoop too low in politics. He maintained his delicadeza and high quality of statesmanship.

He took defeat in stride, with the same humility, graciousness, tolerance and cooperation so distinctive of his character. He gladly spent a part of his private life for public welfare by serving as member of the council of state from 1948 till his death on Oct. 19, 1961. — *Bernabe B. Paquio, Manila Bulletin.*

TO BE REMEMBERED

One Sunday afternoon I fell to thinking of an elderly gentleman in failing health whom I had not seen for a long time. "Why not surprise him by calling him up?" I asked myself.

"I was thinking of you and I wanted to have a little chat," I explained to the old man when he came to the phone. He was delighted, and we had an enjoyable five-minute visit.

His wife told me a few days later that my call had done more for him than a whole bottle of tonic. "You know," she explained, "the telephone almost never rings for him any more." — *David Dunn*

■ **The last meeting of the representatives of distinguished institutions of higher education and its significance.**

WORLD CONFERENCE OF UNIVERSITIES

One of the most important conferences on higher education took place in Tokyo from August 30 to September 6 this year. It was the quinquennial meeting of the International Association of Universities. The meeting preceding it was held in Mexico City in 1960.

About 400 universities and institutions of higher learning from all parts of the world participated in the Tokyo conference. Seven Philippine institutions were officially represented. They were the University of the Philippines, University of Santo Tomas, University of the East, Centro Escolar de Señoritas University, Philippine Womens University, National University, and Foundation College of Dumaguete, these being full members of the IAU.

The International Association of Universities is not sponsored by any government or state. So universities from all parts of the world, public and private, free, communist, and neutral, sectarian and nonsectarian, are represented without distinction. Political subjects are not included in the agenda at any meeting. The sole requirement for membership is that an institution should maintain satisfactory standard of instruction. And in this connection, the directorate has decided that admission of new members will henceforth be stricter than in the first years of the Association's life, some twelve or fifteen years ago.

In the Tokyo conference the general subjects in the agenda which were discussed by the representatives were three in number, namely: Access to Higher Education, University Autonomy, and Contribution of Higher Education to Economic and Cultural Development.

To enable the entire conference to consider the different points or phases of each subject, three separate working groups, which were smaller groups or committees of about 20 members each, were organized. The procedure followed was: first, a plenary session was held on each subject; and this was succeeded by a close-door session of the working group or committee assigned to consider the points raised during the plenary session and to summarize them. Another meeting of the working committee was held the day following to which any member or representative of any member institution could go and take part in the discussion of different points brought together in the first meeting of the committee. In this session any member may question any point presented before or add any new idea pertinent to the general subject. After this the rapporteur makes a summary of the various points which received group approval. In the general and final plenary session, the 3 working committees presented their summaries. The President of the Association then submitted them to the entire conference for final approval or modification. This was the concluding part of the program of the conference.

On the last day the election of the President for the following five years took place. Dr. Zurhaik, well-known professor of history of the American University of Beirut and former university rector, was unanimously elected to the post. He succeeds Dr. F. Cyril James, the retiring President, a former professor of economics of the University of Pennsylva-

nia and former President of McGill University in Montreal, Canada.

One cannot help but admire the ability, dignity, and poise of Dr. Cyril James. His speeches were models of clearness in thought and in the logical presentation of pertinent ideas, without circumlocution nor pompous appeal to emotion. His delivery was deliberate and pleasantly measured. Every word and phrase were distinctively expressed, every sentence left no doubt in the hearer's mind about its intended purpose. Vivid pictures and scholarly expressions, all clothed in language of simplicity, made Dr. James' addresses, which were never tedious and long, something which served to enlighten the minds of the representatives at the conference on the significance of the role of universities in the present-day world.

The delegates were largely university presidents, rectors, and vice-chancellors of institutions in European, British, North American, South and Central American, African, Asian, and Australian countries. Ancient universities, such as Paris, Oxford, Heidelberg, Cambridge, Milan, Salamanca, Cordova, and more modern ones, such as Harvard, Yale, Michigan, California, Moscow, Berlin, to mention but a few, were all represented.

Meeting famous scholars, scientists, academic executives, all with long and rich experience in the pursuit of education and learning, is a distinct privilege for all who appreciate the intellectual life. One cannot help but notice the gulf of difference between such event, on one hand, and a convention of politicians, on the other, in which no more than pompous and futuous addresses and comments fill the hall in boresome repetition. This second group attempts to believe that it could solve problems with hasty and superficial solutions. The first realizes the difficulties of the problems it discusses and proposes no

more than suggestions for needed action which may fit certain conditions, with full awareness of the complexity created by rapid changes taking place in the present fields of scholarship, education, technology, and science.

The Tokyo conference of the IAU was of special significance to the emerging nations or the less developed communities in the world today. For in addition to the discussion of the subjects common to all institutions of higher education everywhere, the conference gave particular attention to the role of higher education in the development of the economic, social, and cultural conditions of the new nations today.

The Japanese managers of the conference deserve full praise for the orderly way the sessions were conducted, the excellent reception of the delegates, and the perfect smoothness with which the activities were carried out. Japanese hospitality was unsurpassed.

Finally, one could not help but notice the relatively minor attention given to the matter of the election of the succeeding officials of the Association. There were 28 posts in two administrative bodies to be chosen, but only 24 nominations were submitted by the members or delegates. Consequently, the outgoing executive committee on elections had to designate 4 more candidates in order to fill all the 28 posts. What a contrast this presented to what happens in Philippine elections where for one vacant post there are always ten or more candidates fighting noisily for it. The explanation is simple: the members obviously went to the conference chiefly to participate in the discussion of the subjects rather than to concern themselves with the election of officers. The inexperienced university head who went there to get himself elected to a high post must have come out badly disillusioned.

Membership in the International Association of Universities is surely a mark of distinction and a high privilege for the university or college who acquires it; and attendance in its quinquennial conference can prove a stimulating experience to heads and professors of institutions of learning who are able to take part in its discussions. — *Philippine Weekly Review.*

WISE AND OTHERWISE

Laurels have a habit of dropping when you try to rest on them! — *Drew Pearson*

She learned to say things with her eyes that others waste time putting into words. — *Corey Ford*

Overheard: "My dear, she's the sort of woman who always enters a room voice first." — *Tit-Bits, London*

The test of good manners is being able to put up pleasantly with bad ones. — *Betty Bartholomew*

Nothing is particularly hard if divided into small jobs. — *The Gates Way*

Some girls show distinction—or should one say distinctly?—in their clothes. — *Duncan Caldwell*

All magicians agree that highly intelligent persons are the most easily deceived. — *Fred C. Kelly*

A politician thinks of the next election; a statesman, of the next generation. — *James Freeman Clarke*

■ Haste has been one serious cause of air accidents.

THE PRICE OF PRESTIGE

In 1930 aviation was just beginning to emerge from its turbulent adolescence. Only a quarter of a century had passed since the first powered aircraft had pulled itself free of the Kittihawk sands for twelve triumphant seconds. The childhood of flying had ended with the Great War when the stimulus of self-preservation had driven the warring nations to accelerate drastically the evolution of the flying machine.

After the breathing spell of the 'twenties the farsighted men in every nation saw that aviation was to be the international public transport of the future and that if claims were to be stalked, now was the time.

But if aircraft were to take over ocean liners, they would have to be stable, comfortable and economical. And to be truly economical they would have to be able to carry large numbers of passengers, far more than within the capacity of the largest airplanes then flying.

Britain, Germany and America had all reached the same conclusion. Each had its eyes on the glittering rewards that waited for the nation that could snatch first place in this new field of transport.

Germany, with its military Zeppelins, had established a lead in airship design during the war, but that had been lost in the chaos of defeat. Now, in 1930, it was known that the Germans were working on a vast new passenger-carrying dirigible.

In America the Goodyear Zeppelin Company had completed the world's largest hangar, an ominous portent of what the United States might produce.

The aviation hopes of Britain's first Socialist government were pinned on a sil-

ver-gleaming, cigar-shaped monster, the R101.

Particularly was it the pride of Ramsay Macdonald's handsome Secretary of State for Air, Lord Thomson. It had cost £1,000,000 of public money and it was going to demonstrate with the maximum of flourish that Britain would remain pre-eminent in international transport.

Inevitably the ambition of the policy-maker clashed with the caution of the technical experts.

The Minister had been largely responsible for the Government's decision to back an airship development program and he was determined that this brainchild should make the greatest possible impact. He conceived the idea of having the R101's maiden flight coincide with the Imperial Conference which was to be held in London in October 1930. The airship would make a round trip from England to Karachi, returning while the Conference was still in session. Thus would be demonstrated how Britain's air supremacy was binding the Empire ever closer together.

Later, Lord Thomson was to tell Wing Commander Colmore, Director of Airship development: "You must not allow my natural anxiety to start to influence you in any way." But during the preparation of R101 that same anxiety was made uncomfortably plain to the men working on the project. When, for instance, he was told that the experts wanted more time to nurse the great craft through its teething troubles, the Minister snapped: "I must insist on the program for the Indian flight being adhered to."

The experts had good reason to be concerned about the deadline that had been set for the airship's maiden flight. After one test flight a network of holes was found in the craft's hydrogen bags. The diesel engines that powered this, the biggest airship in the world, were believed by some to be dangerously heavy.

When Sir Sefton Brancker, Britain's Director of Civil Aviation expressed doubts about the wisdom of press-

ing ahead with the Indian flight, Lord Thomson told him: "If you're afraid to go – don't."

If the Minister himself had any reservations he certainly did not express them publicly. He boasted, indeed, that R101 was "as safe as a house, except for the millionth chance."

But the odds were, in fact, much shorter than that. Right up to the last minute an inspector had refused to give the 777 foot long airship the certificate of airworthiness needed for foreign flight. And when in the early evening of Saturday, October 4, 1930, the shrieking diesel engines lifted the airship's 166 ton bulk into the air at Cardington for the maiden flight, the R101 had been tested in her final form for only 17 hours under calm conditions and never at her full speed of 70 mph.

The man chosen to command the R101's historic flight was Britain's top airship ace, Major G. H. Scott. He had captained the R34 on the first trans-Atlantic flight in 1919 and had taken the R100, sister-ship of the R101, to Canada and back just a few months before the latter's maiden voyage. He had also been in charge of the trials of the R100 and the R101.

From the outset Scott was was left in no doubt about the tremendous importance Lord Thomson attached to the Indian flight and its coinciding with the Imperial Conference.

He was well aware, too, of the history of conflict leading up to the maiden flight, the experts' reservations, the Minister's determination.

He knew that in his hands had been placed the prestige of British aviation – more than that, the future of airship development, dependent as it was on government backing.

These were circumstances hardly conducive to the untroubled state of mind necessary to a man commanding a costly and virtually untried airship on a prestigious maiden voyage.

While the R101 was still over London something happened that contributed nothing to Scott's peace of

mind. Almost immediately after the take-off from Cardington there had been an unaccountabl lack of lift. Then gusting winds had made the airship pitch and roll in a way she had never done before. And now, as craning crowds packed the London streets, one of the after engines sputtered and died. Engineers clambered into the cramped engine gondola to carry out repairs and the R101 boomed sluggishly on towards the Channel.

In the luxurious, 60-foot, white and gold lounge of the airship aperitifs were being served to Lord Thomson. Sir Sefton Brancker and Lieutenant-Colonel V. C. Richmond, the designer of the R101. This was a foretaste of the comfort and elegance that future globe-trotters could expect.

Through the darkness the R101 droned over the southern countries while engineers tried to breathe life into the dead engines.

Even at this stage Scott might have been justify in taking his command back to Cardington.

The weather report that came crackling in over the airship's radio would, in conjunction with the engine defect and the craft's trial history, have certainly vindicated him had he decided to abandon the voyage then.

The distinguished passengers rose from their celebration dinner and went down to the fireproof smoking room to enjoy their cigars.

Now the gale was hammering at the airship. Ahead lay the width of the storm-tossed Channel. Now, if at all, was the time to turn back.

At that moment did Scott recall the words spoken just before take-off by the Air Ministry's airship expert, Wing Commander Colmore: "If she doesn't get back in time for the Imperial Conference, not only will there be no money for further airship work — it just won't be asked for."

The R101 pressed on into the howling darkness.

Over the Channel the engineers managed to restart the dead engine. A few minutes after midnight the R101 crossed the French coast.

At Poix Aerodrome between Abbeville and Beau-

vais, the duty officer heard the thunder of airship engines and rushed to the window. What he saw was frightening. The R101 was crossing the airfield at no more than 300 feet.

At 2 a.m. lights flashed on in the town of Beauvais and people rushed into the streets to see the giant shape roar overhead.

Five minutes later the R101 suddenly angled into an uncontrollable dive and crashed, bursting into flames, near Beauvais Ridge.

Forty-six men were killed outright, including all those responsible for the creation of the R101. Eight emerged from the wreckage. Two of them died from their injuries.

The flames that consumed the R101 destroyed Britain's faith in airships.

With the clarity of hindsight it is easy to say that Scott made the wrong decision, that considerations of politics and prestige should not have weighed with him for an instant. Indeed, the court of inquiry into the crash concluded that, had those responsible been entirely free to choose the time and the weather for the voyage and if the only considerations had been those of metereology and preparation, the R101 would not have started when she did.

The R101 flew when she did because reasons of public policy made it highly desirable that this should be. That the instrument of public policy should have been a man of such dynamism and determination as Lord Thomson made the need to press on all the more compelling. — *David Ettrick, Variety, July* 18, 1965.

ROUTINE

> Routine is the god of every social system; it is the seventh heaven of business, the essential component in the success of every factory, the ideal of every statesman... Unless society is permeated, through and through, with routine, civilization vanishes. — *Alfred North Whitehead* in *Adventures of Ideas.*

■ He changed chemistry's direction from transmiting things to gold to improving the health of men.

PARACELSUS

The latter part of the 15th Century was a period of revolutionary changes. America had been discovered. Printing had been invented. Science was shaking off the shackles of tradition.

At the height of this period, in 1493, there was born in Switzerland a man who became a revolutionary leader in chemistry by changing its course from the vain pursuit of alchemy to a realistic search for new chemical compounds and to the investigation of their value in healing disease. He is known by the name which he gave himself, Paracelsus.

His family had christened him Theophrastus Bombastus. To many people, there was significance in that name, Bombastus. In the estimation of the professional class of his age and of some scholars even today, he was indeed nothing but the bombastic knave, a charlatan, an egoist who saw himself supreme and who arrogantly derided the leaders in his profession as incompetent and ignorant.

The truth is somewhat different. By nature his spirit was a fighting one and he attempted, single-handed, a rebellion in two sciences, chemistry and medicine.

After finishing college, he spent several years in mining laboratories and in them he became proficient in the chemistry of his day. "Why are not chemical compounds of the metals used in medicine?" he wondered. At the age of 24 he decided to study medicine and find out if they could be used.

On returning to the universities, he was appalled to find that the training of a physician included no laboratory work whatever. Medical training was little more than a parrot-like me-

morizing of ancient, mystical writings.

His experience in chemical laboratories had formed the habit of experimentation and of free inquiry as the means of acquiring knowledge. He left the universities in disgust and resolved on an unconventional method of training, to travel and to pick up his medical education as he went.

"In all corners of the world," he wrote later, "I questioned people and sought for the true and experienced arts of medicine. Not alone with the doctors; but with barbers, surgeons, learned Physicians, 'women, magicians, alchemists; in the cloisters with the noble and the common, with the wise and the simple, I sought for a foundation of medicine which should be unspotted by fables and babble."

His travels carried him over the greater part of Europe. At the end of nine years, some of which had been spent as army surgeon and physician in the wars of the day the fame of his cures had become widely known. In 1526 he was appointed city physician of Basel in Switzerland and made professor at the University in a new department of Chemical Medicine. Its emphasis on chemistry as the important factor in the treatment of disease, represented the philosophy of medicine which Paracelsus wished to established.

He saw in it an opportunity for his fighting spirit. Tall,stocky, he had the strongly molded head of a Cicero but the face of an Old Testament Prophet, a man of passionate convictions, with the sense of a mission. Appreciating the abyss that separated him from the physicians of the day, he decided upon an outright break with the accepted order. He denounced and derided the old school. His lectures were not in Latin, the accepted language of scholars, but in German, the language of the people. His appeal was to the younger generation.

He emphasized continuously the importance of chemistry. As he put it, "I praise the chemical physicians, for they do not consort with loafers or go about gorgeous in satin, silks and velvets,

gold rings on their fingers, white gloves on their hands, but they tend their work at the fire patiently day and night.

"They do not go promenading but seek their recreation in the laboratory, wear plain dress and aprons on which to wipe their hands; they thrust their fingers amongst the coals, into dirt and rubbish and not into golden rings. They are sooty and dirty and hence make little show, they do not gossip with their patients, they well know that words and chatter do not help the sick nor cure them. Therefore they busy themselves with working over their fires and learning the art of chemistry."

When violent opposition arose, he redoubled his attacks upon the older school in remarks that became more and more virulent. He showed his derision for the ancient books by burning one of them in a public bonfire.

Not satisfied with having one good fight on his hands, he undertook another. He sought authority to inspect the offices of the local apothecaries, with the aim of improving the purity of their drugs and of reducing the price. The opposition which this excited, aroused another important element of privileged society against him.

His lectures continued for a year and a half and then were suddenly closed by an incident that had no direct connection with his teaching. This incident led him to attack another important element of society, the judiciary.

A wealthy citizen had long been troubled with a baffling disease. Fearing that it would prove fatal, he offered 100 gulden to Paracelsus to cure him. After a few treatments, the man recovered, so rapidly that he considered 100 gulden as altogether out of proportion to the medical treatment. With some derogatory remarks, he offered to settle for six gulden. Paracelsus was enraged and took the matter to the courts. The Judges, however, were as unimpressed as the patient with the value of the medicine used, just a few small pills, resembling nothing so much as sweepings from a pantry infested

with mice. At this, Paracelsus' sense of injustice burst out of bounds. He denounced the Judges in Court in such terms as to warrant charges of treason against him. Warned by his friends, he saw that the game was up. He left Basel that night and resumed the wanderings of this early years.

The remaining 13 years of his life found him continually unsettled, staying in no one place for long and encountering opposition from those in authority wherever he went. His one outstanding thought was to reduce to writing his revolutionary philosophy of the use of chemical compounds in the treatment of disease.

Of the many manuscripts that he wrote, however, few were allowed to be published because of the interference from universities. Occasionally his fortune was up but it was mostly down. Sometimes he would reside in a town for a year or so, sometimes he was feted at a public dinner as the guest of honor, but for the most part his life was one of wandering, and his only home the inn where travelers stayed. It was in Salzburg at such an inn that he died in 1541 at the age of 48, an old man, sick and worn out, his adherents few, his aims seemingly unaccomplished.

He was not to perish, however, with the death of his body. Unknown to the world at large, his rebellious spirit was still sputtering, enclosed in his manuscripts. It was they which were destined to accomplish his revolution. It was indeed 20 years before any search for them was made. An official inquiry from Vienna brought some to light and their publication aroused a demand for others. Soon a complete edition of his books appeared.

Then began the second period of Paracelsus' life, with his books renewing the revolution. The pen proved to be mightier than the tongue. The number and repute of his adherents increased.

Many of his writings are surprisingly modern in their point of view; a treatise, for instance, on the occupational disease of miners, smelters and metallurgists, emphasizing means of prevention as

well as of cure; another on nervous diseases, insisting on physical cause rather than demon origin; another on surgery, opposing the practise of closing wounds with poultices and stressing the prevention of external infection.

It had been his insistence on the value of mineral remedies that aroused the strongest opposition. They included many salts of metals, largely mercury and antimony and also lead, arsenic, copper and iron. The human body is a combination of three properties, he maintained, and disease is due to the presence of a foreign parasite which disrupts the normal correlation between the three properties. The function of a medicine is to stimulate and strengthen the vital force within the body so that it may suffocate the parasite.

Such conceptions were a complete break with the theories of the old school, which he discarded as well as their practises of bloodletting and purging. It was in chemistry, however, that his real revolution was effected.

Chemistry as a science had fallen to low estate. Its main attention had been given to alchemy, in the vain aim of transmuting base metals into gold. "The object of chemistry," as Paracelsus put it, "is not to make gold but to prepare medicines."

New leaders in chemistry arose who devoted their lives to this study, the pursuit of medicines. It is their work which makes up the history of chemistry for 150 years after the death of Paracelsus. These leaders were physicians. In time, they found that chemistry is too broad a science to be simply the hand-maiden of medicine. Their interest was growing in the composition of compounds, in identifying the constituents of matter and in isolating the fundamental elements. They were experimenting so as to understand and explain the processes of combustion and of oxidation.

The outlook of Paracelsus, limited as it was, had invigorated mens' minds and directed them to modern science. — *General Electric Science Forum.*

■ An effective way of overcoming language ignorance in strange lands.

COMMUNICATION BY SIGN

The roadsigns have inspired a very interesting attempt towards the simplification of language — the creation of a silent sign language. This initiative was taken by a United Nations committee in charge of facilitating communication for whatever citizen in whatever country. The signs would represent significant symbols, like an arrow to represent movement, a broken glass, fragility, two crossed knives a restaurant. Already this type of signs is being used widely in crossroads where citizens of different countries meet, like international airports or the bigger airlines. The railways are beginning to adopt the same hieroglyphics.

It is a glaring paradox that the impediment of language barriers is most felt in our travel-and-communication oriented times. Short of speaking five or six principal languages, it is impossible for a citizen of any country to be able to converse with a citizen of a distant country who knows only his native language. Nevertheless it is some times necessary for the two to communicate. What to do then? Of course everybody knows how to express a desire to eat. But how does one say what he wants to eat, how he wants it cooked? The language of gestures is easily exhausted. How does one ask for the location of toilets without risking embarrassment?

Let us imagine a Frenchman arriving in a small town in a Japanese province where no one speaks European languages. He leaves the train station and finds himself in a strange world. He will hardly know the way to a barber shop. And all his moves would require a great waste of time.

That is why the United

Nations wish that the need for exchanges between countries, so violently demonstrated since the last war, should not be frustrated by language difficulties. The objective is for all foreigners to be able to find all their elementary needs by themselves. It would be sufficient to look at the signboards for the needed information. To be sure, this kind of writing is not new. It is the same as that discovered on the walls of prehistoric caves. It was sign-writing which allowed personal communication between peoples of the old Middle-East civilizations and in times when the Greeks and Romans started their commercial activities.

Cicero, Cato, Plutarch and Seneca were among the most ardent protagonists of sign-language. Alchemists of all countries communicated their formulas and discoveries only by conventional signs. Most of the chemical compounds including metals, were represented by crudely drawn signs. Today many sciences have an international language based on signs. Biologists represent the sexes by the sign of Mars for the male and the sign of Venus for female.

Electricians and electronicians have established a voluminous code of signs and crude drawings. Atomic scientists have adopted the black, yellow or red ring with three breaks.

An international symbol has been finally adopted to designate the post office — it's the hunting horn of the Swiss post offices. The choice of symbols is an extremely complex work. For example, it was proposed to the United Nations to use as symbol for fragility a broken egg. After days of discussion it was admitted that in certain communities like the polar regions, they may not be able to understand the meaning of this broken egg sign, because they don't eat eggs in that region. It was therefore the broken glass which was assigned to express the idea of fragility.

We are only at the beginning of this important revolution in the communication between different countries and continents. Different groups of specialists work simultaneously for the

establishment of this sign language. An International Council of Organizations for Graphic Communication is doing its best to coordinate the different researchers undertaken here and there. The basic quality of a language of signs is simplicity. The maximum of symbols should be able to be learned with the minimum of difficulties. Hence the necessity of choosing highly significant symbols, completely devoid of ambiguity. The choice of the drawn object is not enough. It must be so designed as to be immediately comprehensible. For example, a single knife does not necessarily suggest the idea of eating and consequently, a restaurant. On the other hand, two crossed knives make one think invariably of a table service. The second arrangement was therefore retained.

The vocabulary of signs will probably be definite in three months time. We will then have at our disposal in all cities, signboards of our modern hieroglyphics to help us set foot in the still inaccessible regions of our own planet.

SURPRISE!

A friend of mine in the island of Guernsey one day settled down in a small, deserted bay to read, hidden behind a sand dune. Presently two young girls came along and seeing no one, undressed and stretched out to sun-bathe. Soon a parson appeared carrying a camera, and believing himself alone, left his clothes on the beach and swam around the neighboring headland.

Out from behind their sand dune stole the two girls to where the parson's clothes lay, picked up his camera and each snapped a picture of the other. After which they replaced the camera containing these candid portraits and returned to their hiding place.

■ Scientific experiments that have produced real pearls of great beauty.

PEARLS-TO-ORDER

While most sellers of pearls to the commercial market hire divers to bring up a supply, dynamic 78-year-old La Place Bostwick, of Punta Gorda, Florida, brings up his own.

Bostwick doesn't dive for them. He doesn't have to. He is the only man in history ever to have perfected the technique of growing flawless gem pearls—real pearls — from start to finish. Experts in the United States say that they are often even better than those which grow naturally.

Bostwick's jewels, grown under scientifically controlled conditions, are not to be confused with those of wizened, 90-year-old Japanese Baron Kokichi Mikimoto, mass-producer of culture pearls. Mikimoto's million-dollar industry is almost a production line affair, his workers developing culture pearls in thousands of oysters by inserting tiny mother-of-pearl beads.

Bostwick's business is based on ancient knowledge. For thousands of years man has known that a grain of sand or other irritants which drift into a mollusk's shell might create pearly formations and, in exceptional cases, a fine pearl. Bostwick began working from this base, but he soon learned how to achieve excellent results without using a foreign nucleus.

Solely by irritating the spiral of a queen conch with skillfully handled surgical instruments, he started the pearl-making process. After a few years of tending the creature with others in a fenced area of shallow water near Key West, Florida, he opened the conch and found the pride of all his treasures. It was a large, pink, egg-shaped, 43 1/2-grain beauty —almost 11 carats in jewel

weight. Collectors throughout the world have offered fabulous sums but he prefers to keep it.

News of this now internationally famous, home-grown gem pearl excited the desires of would-be growers. Many an amateur scientist with get-rich-quick ambitions pried open a reluctant mollusk, chucked in a bit of sand, and prayed. But one of three things happened: (1) the creature died: (2) it lived and produced merely a rough, dirty coating of nacre (mother-of-pearl); (3) a small, imperfect or attached-to-the-shell pearly growth appeared.

Knowing how and where to insert the irritant without creating internal pressure which kills the mollusk is the principal problem in developing culture pearls. Those who gambled for real pearls forgot the grain-of-sand method and probed with scalpels to learn Bostwick's secret. All they had to show for their efforts were dead mollusks, for even if the experimenter is well-versed in margaritology (the science of pearl cultivation) he cannot perform the necessary operation without a highly skilled hand.

When Bostwick began his experiments almost 60 years ago, he had no idea of the many obstacles before him. "But I've always had an urge to do things that others couldn't do," he recalls. "As a youngster, I often watched shellers bringing up mussels from the Mississippi bottom near Muscatine, Iowa. I used to wonder then why the formation of pearls was left purely to chance."

Many times he saw the "shellers" open mussels and find pearly formations — occasionally a perfect pearl. So when he was graduated from high school and enrolled at the University of Iowa, he had a prime educational purpose: to learn all he could about pearl-growing.

In 1893, young Bostwick started experimenting with mussels in a remote Mississippi bayou near Muscatine Island. In fenced-off portions he placed hundreds of live mussels on which he had operated, then carefully observed them and recorded his findings. Meantime he became a pearl buyer and successful jewelry designer.

Despite business success, however, Bostwick was dissatisfied, and his insatiable curiosity about pearl-growing caused him to stake his life's savings in an all-out effort. In 1908, he bought property on the Iowa River at Iowa City, spending $25,000 to erect the first laboratory devoted exclusively to margaritology. This 40-by-60-foot, one-story cement structure with star-glass windows — clear to lookers-out but opaque to those trying to look in — was camouflaged with semitropical plants. Residents of the area called the place the "House of Mystery."

Bostwick foresaw every minute detail in his job of duplicating the Iowa River indoors. Knowing the living habits of fresh-water mussels, he gave them everything to make them feel at home. There were artificial waterfalls and fountains to aerate water. He even weighed mud, gravel and sand, and applied the ingredients in the proper Iowa-bottom portions to the floor of each run.

In August, 1908, the stage was set for his first try at producing culture pearls. Choosing healthy specimens, Bostwick placed them in a flow of water across the operating table. When the shells opened, he carefully inserted plugs to keep them from closing. Then he anesthetized the specimens and performed the delicate operation of inserting small mother-of-pearl balls.

Bostwick paced in expectant-father fashion before his tanks of sluggish patients. He slept little and worried much. However, within 14 days the mussels showed a return to normal living habits. At the end of two years Bostwick reaped a small harvest of perfect ball pearls.

What fascinated him more than the growing of pearls was learning each minute detail regarding the formation of the wondrous round gems. A mollusk secretes a fluid called nacre, which hardens and becomes its protective shell and home. Oysters, mussels, abalones and conches, being allergic to rough surfaces, consequently build smooth and shiny shell walls.

Any irritant that enters the shell and contacts the

delicate skin — a grain of sand, a bit of wood — starts an automatic flow of nacre. If the animal cannot get rid of the particle, he builds his comfort around it. Dab after dab, the mollusk applies nacre to the irritant.

The foreign particle, round or irregular, keeps shifting turning with every muscular movement. Though exceedingly thin, each dab of nacre has an edge that irritates, causing more flow. Slowly the animal builds an entire pearl as the irritant turns and is covered patch by patch with nacre. The pearl's beauty is attributed to the shingle-like application of thousands of semi-transparent dabs of nacre, often too small to be seen without a microscope.

Bostwick learned this step-by-step process by developing culture pearls early in his career, thus acquiring the invaluable information that enables him to grow real pearls today. Using specially designed instruments, Bostwick now irritates the right spot in the specimen's anatomy, causing a slight flow of nacre. The operation is so complicated and demands such finesse that it might well cause a surgeon to stop and wonder. No grain of sand, no small particle of any kind, is necessary. Surgery causes the animal to create its own nucleus. Hence the gem is all pearl from start to finish.

Commercial buyers, aware of Bostwick's fine work, have backed other margaritologists, but so far results have been disappointing. For this reason, and because Bostwick's conch pearls are rare beauties, buyers, throughout the world call for his products, some of which he sells. He could have become a millionaire several times over if money had been his chief aim in life.

"There are always so many new things to learn in the lab that I haven't the time nor the inclination to become wealthy," he says.

It is usually not difficult for experts to distinguish a genuine pearl from a cultured one. A real pearl when held up to bright light is more translucent than the cultured variety. Furthermore, a cultured pearl rarely duplicates the multiple possibilities of light-wave reflec-

tion from the various depths and minute patches of nacre. The real gem has rich luster, great depth and a fine texture, and is unbelievably lovely in color.

The price of pearls, of course, is determined by excellence, perfection of shape, color, texture, luster and depth (or "orient"). The price of a fine pearl weighing 20 grains would be computed by taking the square of the weight — say 20 times 20. If the rate per grain is $5, the price is $2,000.

Bostwick has written much about pearls — he is at work on a book now and enjoys taking an occasional poke at popular notions about his favorite gems.

"There's a legend that Cleopatra, trying to win Marc Antony, dissolved a fine pearl in a potent drink and served it to him," he says. "Cleopatra must have been a sleight-of-hand artist or Antony's eyes were dulled by drink. Even if Cleopatra had gone to the trouble of beating the pearl to powder and trying to dissolve it in vinegar, the process would have taken two weeks. And I doubt whether Marc would have sat out one drink quite that long!"

La Place Bostwick, jaunty and sunburned, is still a youth in the spirit of exploration, experiment and adventure. Somewhere near Key West, he is now working to produce rare golden pearls of rich luster, perfect shape and wondrous texture, which will have agents of Indian princes, world royalty and multimillionaires stumbling over one another with bids for Bostwick's jewels. Some he may sell in order to maintain himself and his work. Others he will no doubt want to keep as lustrous reminders of his progress in scientific experiment.

Already Bostwick has grown pearls of breath-taking beauty never even imagined in *Arabian Nights* tales. They are all colors—white, yellow, brown, black, and every shade of green and blue. Yet, far from satisfied, he is trying to make his many individual living-pearl manufacturers produce an even finer golden pearl.

He seriously doubts, however, whether he will ever be quite satisfied. — *by James F. Scheer, from Coronet.*

■ Admission of students to university education through "science Olym pics."

SCIENCE TRAINING FOR LESS DEVELOPED REGIONS

Ours is an era in which new knowledge is accumulating in all fields. Every major scientific discovery leads to applications that require a high degree of specialization. And the growth of automation, while reducing the need for medium-level personnel, is increasing the demand for creative scientists and engineers.

It is obvious that the sooner we begin to train teen-agers, the more chances they have of becoming creative scientists.

These problems of selecting and educating youth, then of training them as engineers, researchers or industrial planners must be faced in the Soviet Union as in the United States, Britain, France and elsewhere. But whatever the economic system, various schools of thought exist within each country as to the practical solutions that should be adopted.

In the Soviet Union, widely differing views have been expressed on the subject. I would like to describe an interesting experiment carried out in recent years by scientists at the Siberian branch of the U.S.S.R. Academy of Sciences.

The shortage of qualified specialists in research and technology in Siberia led to the creation of a major scientific centre in the city of Novosibirsk, nearly 3,000 miles from Moscow. Lack of suitable personnel was hampering the development of this immense and rich region where oil, natural gas, coal, iron and gold are plentiful. Siberia also contains the world's biggest supplies of fresh water and hydro-electric plants already in operation or under construction were creating an

enormous power potential for industry and science.

The shortage of scientific personnel was particularly acute in Siberia's schools and institutions of higher education. The research institutes, new industries and vast construction jobs were draining the best mathematicians, physicists, chemists and biologists from educational institutions, and the training of the new generation of scientists was in the hands of teachers who were not always in touch with present-day problems.

When the University of Novosibirsk was established a heated debate arose on the question of entrance requirements. Some felt that admission should be limited to youths with a definite scientific bent and some training in science. Others maintained that the doors of the university should be opened wide to high school pupils with top marks so that all vacant places might be filled. There was also a controversy between those who advocated highly specialized scientific training concentrated in laboratories and those who favoured more traditional methods of education.

Since both sides stuck to their guns, a compromise had to be reached. But the results were unsatisfactory: too few students were being admitted and the level of knowledge was too low. Discussion began all over again and led to a new method of selecting students for the university. This plan, applied since the 1962-63 school year with excellent results, consists basically in the organization of "Scientific Olympics" and the creation of a specialized boarding school on the Novosibirsk campus.

Here is how the selection process works. Every year in November or December, the press, radio and television announce the first round of the Siberian Olympics in physics and mathematics and, beginning this year, in chemistry and biology. This round is conducted by correspondence. Ten to fifteen problems in mathematics, physics and chemistry are set and secondary school pupils have a month to send in their answers to Novosibirsk. Among the problems, some

are of our eighth-grade level and others at tenth grade. In both sections, certain questions are designed to appeal to the contestants' creative imagination. There is no limit to the number of replies sent in by contestants, for the main purpose of this first round is to awaken an interest in science. During the first Olympics in 1962-63, several hundred teen-agers took part; this year, we had nearly 10,000 competitors.

Candidates who do well in this first round are invited to take part in the second round of the Olympics held in fifteen to twenty regional centres in Siberia, the Soviet Far East and Central Asia. All expenses are paid by the Academy of Sciences. These tests, organized in each centre by three or four representatives of Novosibirsk University, are harder than the first and contestants have to solve the problems in a set time.

Winners of this second round are then invited to spend a whole month on the Novosibirsk campus attending a special summer school. The first year, we had 100 young people; last summer, 700; and this year, over 1,000. Under the leadership of about 100 young scientists and senior students, the boys and girls visit the institutes and laboratories, and attend lectures given by university professors and researchers. They divide their time between study and leisure — hiking, swimming, boating, etc. This gives the Academy staff an opportunity to establish close contacts with each teen-ager.

The third and last round of the Olympics takes place at the end of the month's stay. Problems set are harder than in the previous rounds but most participants are accepted and remain on the campus, some entering the University while others who are still too young are admitted to the special boarding-school. Graduates from this school, where courses in physics, chemistry and mathematics are given by leading scientist, are assured of admission to the best scientific institutes. — *Variety.*

■ How do you classify yourself when you go abroad?

THE TRAVELER AND THE TOURIST

There are travelers and tourists. Tourists see the sights and miss the country. Travelers see the country and the sights, too. Travelers are received with hospitality because they come with a special interest, tourists with condescension because they come only with curiosity.

One of the wisest travelers I know is a soup taster. He goes all over the world dipping his beak into the peculiar *potage* of each country, tasting, comparing, collecting recipes. Since he travels with an objective his wanderings take him off the beaten tracks.

Do you like gardens? Passionate gardeners in every city in the world will take you to see their gardens. En route you will see the temples, palaces and shrines. You can't miss them. But if you go out only to see the sights you'll miss the gardens — and the delightful people who live in them.

Are you a collector? I have a friend who goes everywhere looking for playing cards — the smallest, the largest, cards made from wood, bone or alligator hide. In every port you'll find a fellow collector, whether it's stamps or coins, old books or old bottles. If he doesn't speak English, he has friends who do and are anxious to practice on you. Through him you'll see and hear more than the most indefatigable tourist.

A friend of mine collects missionaries. "They are mighty glad to see me," he says. "I bring news from the outside world and they give me a real insight into the country. Then they pass me on to the next group with letters that insure me warm hospitality. Living in out-of-the-way places, know.

ing the language, running schools and hospitals, they have intimate everyday knowledge of amazing variety, a fund of stories and experiences that would thrill a tourist — but tourists never see them."

On the other hand, a priest I know never visits a fellow clergyman. He calls on — of all people — jail wardens. I met him in the largest jail in the world, in Shanghai, and he told me his interest in penology had made it possible for him to travel everywhere with pleasure and profit.

Are you a Rotarian? There are clubs everywhere. The members will gladly show you the town, their wives will acquaint your wife with the best shops, the proper prices, the best hairdresser, the place to buy an ice cream soda. In Egypt are the Pyramids. And behind the Pyramids lives Dr. George A. Reisner, the great Egyptologists whose post office address is just that — Pyramids, Egypt. But where did I find Dr. Reisner? At the Rotary Club in Cairo, which he attends every week.

People often say to me, "It's all right for you to talk; you're a writer and all you have to do is to look up some newspaper man when you go into a strange city." Often the speaker is a doctor, a lawyer, a banker, or teacher, and I remind him that he will find doctors, lawyers, bankers and teachers everywhere. "You don't have to be a tourist wandering around aimlessly, or being herded here and there," I tell them. "A doctor I know visits hospitals and clinics, exchanging experiences and getting new knowledge. He winds up by being taken to a lot of places his fellow tourists never hear about."

Are you a lawyer? I know one who visits courts in every place he goes. Are you a musician or a music lover? You will find music makers everywhere. Are you interested in art? Don't limit your interest to art galleries. Dig out a few artists and you will unearth the most interesting parts of the country, the best food at the cheapest prices, and a treasury of information. Artists

find the picturesque places — because they are artists — and they stay because it is cheap.

Don't be a tourist. Throw away your guidebook and follow an interest. Whether your passion is architecture or orchids, child welfare or rock gardens, fishing or folk-dancing, butterflies or bridge, you will find devotees everywhere.

On one trip to Japan I concentrated on the theater — the popular Kabuki, the classical No, the girl opera, vaudeville, where a tourist is as much of an attraction to the audience as any of the stage numbers. I went to Japanese movies and to the studios where they are made, to the Puppet Theater in Kyoto, the only show of its kind in the world, and the Takarazka school near Kobe where hundreds of Japanese girls are taught to sing, dance and act. I learned a lot about the theater but I learned even more about Japan.

The next time I concentrated on schools — the Imperial University, nursery schools, country schools, the traditional school of the Peers, schools for wrestlers, schools for geishas and even a brides' school. I saw no tourists in any of these places, but I did meet some interesting travelers.

The best-informed person I met in Bali ran a children's clinic as a hobby. To her house every morning at eleven a stream of children with stubbed toes, cuts, bruises and bellyaches come for free treatment. Treating the children, she has made friends with the parents, who invite her to all their family feasts and religious ceremonies, and even send their prettiest village dancer over to entertain when she has company.

Once, while in the greeting card business, I made a trip to Europe looking for hand made paper and special ribbon. I found villages in France where they made nothing but ribbon, and every household a different kind. I found one family that had been making the same exquisite paper for generations — since before Columbus discovered America. I have toured France many times — one year collecting Gothic cathedrals, another concen-

trating on the wines of the country — but I saw more of France, the out-of-the-way, the picturesque, when I was on a crass commercial chase for ribbon and paper.

Do you sell? Do you buy? Do you manufacture or ship? Your rivals and allies are everywhere. Whether you make bricks or lay them or throw them, the sun never sets on your co-workers, collaborators or conspirators.

Don't travel to "get away from it all." Have you an interest? A hobby? A profession? A skill? Take it with you. The Cubans have a word for tourists — "ducks" — in derisive tribute to the way tourists follow each other around, quacking to themselves, and waddling home again blissfully happy — though, while they have looked at everything, they have seen nothing. Travel with design and you broaden your knowledge; tour with idle curiosity and you flatten your arches. Don't be a "duck." — *J. P. McEvoy, from the Rotarian.*

YOUTH AND MATURITY

I know of no greater fallacy or one more widely believed than the statement that youth is the happiest time of life. As we advance in years we really grow happier, if we live intelligently. The universe is spectacular, and it is a free show. Increase of difficulties and responsibilities strengthens and enriches the mind, and adds to the variety of life. To live abundantly is like climbing a mountain or a tower. To say that youth is happier than maturity is like saying that the view from the bottom of the tower is better than the view from the top. As we ascend, the range of our view widens immensely; the horizon is pushed farther away. Finally as we reach the summit it is as if we had the world at our feet.

■ A great sculptor and his strange devotion to his model and companion.

AUGUSTE RODIN

In the 1860's, Rose Beuret, a freshcheeked peasant girl, came from Champagne to Paris, where she met Auguste Rodin, a young sculptor, and there began a strange love affair which didn't end in marriage until 50 years later. For Rodin had pagan theories. They lived together; Rose cooked, mended, and served as model, but even the birth of a son did not persuade Rodin to marry her.

Later, when Rodin had the world at his feet and a stream of famous men and grand ladies came to the studio, Rose kept entirely in the background, opening the door in her old apron and slipping back to the kitchen. Many people thought she was just a servant, and so she was except that her only wages were smiles from the man she loved and his occasional: "You are the one I love."

In 1916, however, at the age of 76, Rodin signed away his possessions to the State for a life pension, and found that if he died before Rose, the State would grant her no pension unless they were married. So after living with her 50 years, he decided to marry her.

The day of the wedding, it was freezing and France was suffering from a fuel shortage; Rodin and his poor old fiancee hobbled around wrapped in all the clothing they could find, but the old lady was happy. "Yes, my dear," she said, "it's my turn at last." As the ceremony was read, they huddled together for warmth with a rug over their knees.

Never was there a stranger honeymoon. Neither friends nor officials could procure an ounce of coal, so the old couple stayed in bed from morning till night, holding hands between two beds and

talking about the past.

But they had not been married a month when Rodin watched his good Rose die. "I'm all alone now," he said, like a lost child. It was the first time Rose had given him cause to weep. — *From the book Rodin: Immortal Peasant by A. Leslie.*

A TEST OF SALESMANSHIP

Back when I started in the automobile business in Chicago, it took courage to buy a new car. Only mechanics or close friends of mechanics dared to buy used cars.

But one day a veterinarian stopped by to look at a secondhand Jackson. He requested a demonstration. With reckless abandon I agreed to drive him home.

To my great shock, the doctor's home turned out to be on a farm 40 miles away. Despite the fact that Jackson's slogan was "No hill too steep; no sand too deep," only stouthearted adventurers ever crossed the city line in a 1905-model Jackson.

But a miracle happened that day in Illinois. Though the long-suffering engine banged and pounded like a boom-time boiler factory, the old Jackson made the 40 miles! I was the most surprised 18-year-old kid you ever saw.

In his kitchen, the veterinarian dipped his pen and started to sign the purchase papers. Then he halted. "One question, son," he said. "If you were me, would you buy this vehicle?"

My heart did a flip-flop. I was broke and needed the commission. While debating what to say, I looked up and there on the wall was an embroidered banner that warned: "God hears every word you say."

No sale. — *Paul Hoffman, NBC.*

■ A young and attractive former first lady and her personal problem.

WILL JACKIE MARRY AGAIN?

Jackie Kennedy will be married within a year and in new-found happiness with a man whom she will love just as much as she loved Jack Kennedy, the hideous months that succeeded the assassination of her husband will gradually fade from her memory.

I have known Jackie Kennedy for more than sixteen years, long enough to know the mind and the heart, the desires and the emotions of this lovely woman who was so suddenly and tragically catapulted into the hearts of men and women the world over when her husband was wantonly and callously shot down in Dallas.

The Jacqueline Bouvier whom I knew, the woman who became Mrs. John F. Kennedy, was a woman born to love and be loved. She is not a woman who can live alone or be alone. She is too warm and vibrant, she has too much love to give to a man. She is too human to be alone long.

I know of five men eager to marry the widow of the White House. I know that each of them in his turn within the past six months has proposed marriage to Mrs. Kennedy and I know what she said to each. It was the same reply.

"Give me a little time to reorientate myself. I have not fully recovered from the shock. I cannot give you an answer now. My heart tells me that I will marry again, and soon, because my children need a father to love just as they loved their own father, but I want to marry a man I will love just as much as I loved Jack."

This is not fiction, but fact, for this is what Jackie said to a friend of mine, Paul Thomson Pritchett, who has been a friend of Jackie Kennedy for twelve

years and who was a close friend of Jack Kennedy.

Perhaps one of the hardest facts for Jackie to accept is that the children have stopped asking her when Daddy is coming home and why they do not see Daddy anymore. It was difficult for Jackie to convey to the children that Daddy was not coming home anymore. How do you tell the children that their father, vibrantly alive, smiling and playing with them yesterday, is dead today and will never return?

The children have somehow accepted the fact that Daddy is not coming back. They are reconciled to this although they do not understand why. They have seen their mother in black, weeping, yet aloof and proud and in public drawing a veil over her sorrow, and this has hurt Jackie more than anything else.

"I have often wished since the day when Jack died that the children were a little older," Jackie said to me in her New York apartment last year. "It would have been easier for me if they were older and knew what happened. But they are too small to grasp what has happened and I have somehow had to bring home to them that the Daddy they loved so much is not coming back. It was heartbreaking, but only a mother with small children who loses her husband will understand my true feelings in his hour of grief."

The men who have asked Jackie for her hand in marriage are all old friends of hers, men who knew her when she was a lanky, attractive schoolgirl. They saw her marry Jack Kennedy and had to give up hoping that one of them may have been the lucky man. No one foresaw the coming of the great American tragedy.

None of the men I have in mind married. Some men fall in love with a woman and know in their hearts it would be wrong to marry another woman because they would always be in love with someone else.

Perhaps this is why these men did not marry. I know that this is why Paul Pritchett did not marry.

"I loved Jackie very much," Paul told me, "and when she married to Jack

Kennedy I was one of a few who mourned her going, but I did not stop loving her, I reckoned that she loved Jack more than me, that is why she married him, but I did not find anyone in the years that passed to measure up to the woman I loved so I did not marry. I guess I was unwilling to settle for second best."

What hurts Jackie more than anything else today is to see the eyes of her son and daughter, Caroline and John, light up with childish pleasure when they come into the company of a man their mother likes. I have seen it many times now since the lamentable death of Jack Kennedy. I was in Jackie's Washington home before she moved to New York when Jimmy Harrison Hill arrived from Seattle to see her.

Jimmy, who is exactly Jackie's age, was another of the men who adored her and who sighed miserably when she chose Jack Kennedy as her husband. I saw how the children went for the tall, dark Jimmy Harrison Hill, how they took to him like ducks to water, grasping his hands and walking with him in the garden, clambering over him and kissing him and even falling asleep in his arms when he sat with us in the living-room, and I felt something in my heart I find it hard to describe, a kind of twisting pain knowing how much those little children must have wished that Jimmy was their Daddy, come to stay with them for ever.

I also saw that look in Jackie's eyes as she watched them surreptitiously, the joy her children showed because there was a nice and kind man with them, a man who loved them.

I knew then that Jackie had to marry again, that she owed it not only to herself but even more so to the children. When we were alone later, walking in the garden while Jimmy was reading a goodnight story to the children, I said, "Jackie, you can do nothing about the past. The wounds must heal. Your children need a father. Look how they took to Jimmy."

She was silent for a long time, then she said, "I know, Sue. For the happiness of my children and the fuller

life they have to lead, and for my own happiness I will marry again, but I want a little time. It is so soon. So soon. I have seen how my children react to a man in the house. I know how much they need a father. Some very fine men whom I have known a long time have asked me to consider them for marriage. They did not propose because it is so soon, but they asked me if when I find that I want a father for my children and someone to take my hand and let me put my head in his shoulder, I would remember that they have loved me a long time."

When Jackie marries again —and I am quite sure it will not be long now because she is the kind of woman who needs a man's love—it will be a very simple and private ceremony and probably only a handful of people will know about it. The world will probably know nothing until it is all over and she has gone on her honeymoon to some secluded, private place.

All the men in Jackie's life are rich men so that even if she had no money of her own she could never want for anything. All are good men and all have two things in common: they love Jackie, even worship her, and they love her children not out of sympathy because the children lost their father, but because they are Jackie's children.

Jimmy Harrison Hill told me — and his words were echoed by others — "I love those kids, Sue. I wish they were mine. If Jackie marries me those kids will be mine just as if they were really my own kids. They will never look on me as a stepfather. I love them just as much as I love Jackie. I need her as much as she needs me."

MINK COAT

There's only one thing that makes a man give a mink coat to a woman. A woman. — *Earl Wilson.*

■ A tale of deep and unselfish dedication to a business that failed.

I LEARNED ABOUT LIFE IN A LAUNDRY

Biologists study life through a microscope, sociologists through statistics, but I have studied it at great pains through the pajama, the undershirt, the handkerchief. No, I wasn't a research worker. I was just a laundryman's son.

Nobody ever says anything nice about the laundryman. He is always late with the wash. He loses things. He breaks the buttons on your best shirt. And if, by some miracle, he returns your bundle intact, he does it three days late — so you lace into him.

It's about time somebody came to the defense of this poor, overworked, browbeaten fellow. He, too, is a human being. He has problems, despair, comedy, tragedy and a family of his own, although he never sees them unless they all are working in his store. And usually they are. For 20 years I was a laundryman's son. And though I worked, ate and slept laundry, I still say my father was a fine man — and I will poke anyone who disagrees.

Life in my father's New York laundry began when I was six years old. What I have gone through since then, including 20,000 pockets and unmentionables, would fill several curio shops. A man's private life is not his own anymore — nor is a woman's.

My father had a store in Greenwich Village and, in keeping with the artistic temperament of the Village, it was called the La Boheme Hand Laundry. I remember the early evenings when I helped my father fold handkerchiefs and mangle undershirts. I used to gaze out the window at the same time, watching Life pass by. The

Village had a magic flavor then. The people who entered our store were not just customers. To me, wallowing in the golden dreams of youth, they were the great writers and artists of America. So we had a noble purpose in life.

I remember the young woman who used to bring in her laundry every week. She was always sweet and gracious, and never complained about our service. But after several years, she stopped being a customer. Then one day she returned, and we found a man's collar in the wash. Then an occasional man's shirt, then a half-dozen at a time! And so they were married and lived happily for almost a year.

One day the lady vanished, and my father's social research became fraught with obstacles. In time, the husband started bringing his laundry to the store, but it was all masculine now. No more negligees! But true to the laundryman's creed, my father asked no questions. Then, lo, the negligees appeared again! And some time later, baby things arrived. Thus the marriage was resumed and our whole staff settled down once more to normal living.

We watched this family grow from two to seven — and another from two to fourteen. We watched another shrink when one of its members went off to war, and the young man's shirts never came back. We have followed families from one era of their lives to another from diapers to girdles, and we have learned plenty....

Many people used to bring their laundry to our shop without counting what was in the bundle. Several weeks later they would dash in, aflame with righteous indignation, and cry: "A shirt is missing!"

My father would shrug helplessly and say: "I'll check with the steam laundry. Come back next week and I'll let you know."

This always killed the customer's rage. After a cooling-off period of several weeks, during which the customer was supposed to become resigned to his fate, he was handed a shirt which my father had been saving for just such an occasion.

Lost shirts were always a headache. When a customer raised cain about a shirt that was *actually* lost — he was reimbursed not according to the value of the garment but according to his value as a customer. The client invariably said, "You know, that shirt was brand-new. And it cost five dollars."

Both the laundryman and the customer knew this was a lie, but the laundryman accepted the statement.

Besides having the entire family help in the store, my father also had a salaried employee, an elderly woman who ironed the family wash and made his coffee every morning. Her name was Katey and she had silver hair. As I remember her, she was the kindest and most wonderful woman in the world. She was like a mother to us. She worked for my father for 20 years and ruled over the laundry and all us kids with a loving heart.

When my father came home one night and told us that he had to let Katey go, we all cried. He wouldn't tell us why. He merely said she was getting old and needed a rest. He couldn't keep her forever, could he? We sat listening in silence, too shocked to answer.

When my father finished talking, he walked slowly into his bedroom and closed the door. At that moment we all hated him. How could he do this to Katey — Katey, who was always a part of our lives, just as were the ironing tables and the warm pleasant smell of the store?

We found out the next morning. My father never opened the store again. After 20 years, they had taken his maritime pass away and the local trade had by this time gone elsewhere. He had to give up the store. That's why he had to let Katey go. There was no work left for either of them and, after a great career as a laundryman, my father was at last a broken man.

We couldn't cry any more after that, but we could never forget Katey or the laundry. Years later, I would sometimes walk past the empty store. But I

couldn't look in. A thin layer of dust covered the window and the once-shiny letters were broken, like the memories of those childhood days.

And as I passed by, I would think of my father and Katey, of how they stood side by side so many years until there were hollows in the floor under their feet, and how finally their lives went down the drain, along with the gray water and the soapsuds....

Whenever I tell people about father's laundry, they smile. Perhaps I imagine it, but I seem to detect sadness in their smile, and a kindlier feeling toward their laundryman. Never again, I tell myself, will they heap abuse on him if he breaks their buttons or returns their shirts three days late. For they will understand. — *Herman Styler, from Coronet.*

IDEALS

I consider an human soul without education like a marble quarry, which shows none of its inherent beauties till the skill of the polisher fetches out the colours, makes the surface shine....

Gladness of the heart is the life of man, and the joyfulness of a man prolongeth his days.

A faithful friend is a strong defence and he that hath found such a one hath found a treasure.

He who has a thousand friends hath not a friend to spare but he who hath an enemy shall meet him everywhere.

Get wisdom and with all thy getting get understanding.

He that is slow to anger is better than the mighty and he that ruleth his spirit than he that taketh a city.

■ **Sugar is not only for coffee and cakes but also for industrial uses.**

SUGAR!

You're old-fashioned if you use sugar only to sweeten your coffee and grapefruit. Try varnishing your old porch chairs with sugar. Sugar makes an excellent varnish. Can you turn sugar into gasoline? Do you smoke sugar in your cigarettes? Can you make rubber heels out of sugar? All this and much more is being done with this everyday flavoring.

The sugar varnish is a new product called allyl sucrose. Two chemists at the Eastern Regional Research Laboratory of the U.S. Department of Agriculture, P. L. Nichols, Jr., and E. Yanovsky, succeeded in preparing allyl sucrose after long research.

Allyl sucrose is a heavy, light yellow liquid which hardens into an insoluble transparent resin when exposed to air and heated. It makes a splendid finish for floors, wall coverings, furniture and woodwork. It is extremely hard, shatterproof on impact, very glossy — yet flexible enough to be useful where a stiff plastic would crack. For good measure, it resist water, heat, acids, grease and alcohol. Allyl sucrose is so tough that when welders' goggles are coated with it, the goggles last 400 hours or 100 times as long as ordinary welders' goggles.

If your cigarette is a sweet smoke, the reason is simple. Between 10 to 25 percent of the dry weight of the popular mild cigarette is native or added sugar. In 1948, tobacco manufacturers used 26 million pounds of refined cane and beet sugar. Here's why. The burning tip of your cigarette is alkaline. A sugarless cigarette would give a bitter smoke. The cigarette sugar breaks down into organic acids that neutralize the ammonia and alkalies re-

leased by burning and so give a mild smoke.

Among other things, sugar is a medicine. Sleeping-sickness symptoms such as convulsions and delirium have been relieved by administering intravenous injections of glucose. In diseases of the liver a high sugar diet is a standard treatment since sugar prevents damage to the liver by converting certain poisonous substances into harmless ones. High sugar diets also save the liver some of the labor of converting other foods to glycogen. Sugar is useful in gastric ulcer cases for it quiets the hunger contractions of the stomach almost immediately after it is taken. Since violent stomach contractions are often agonizing to the patient, sugar actually relieves pain.

The same sugar that serves as food and medicine may some day yield an inexhaustible ocean of gasoline. The Carnegie Institute of Technology has stated that by imitating nature in the laboratory we shall be able to obtain a perpetual supply of gasoline and coal from the sugars and starches of plants. Sugar cane and sugar beet would then replace coal mines and oil wells.

One hundred tons of dry sugar cane will, if suitably processed, yield 2,980 gallons of gasoline, 3,430 gallons of medium grade oil and 1,210 gallons of lubricating oil besides 8.45 long tons of raw sugar. And there's plenty of raw material. In 1946, the plant waste in the United States ran to 260 million tons, which was enough to supply every car and truck in the country with gasoline for a year.

Which points up one fact that has deeply impressed industrial chemists — sugar is far and away the most abundant of the pure organic chemicals. About 14 billion pounds of sugar are produced every year in the United States. For comparison's sake, in 1947 about 850 million pounds of plastics were manufactured. Moreover, over 250,000 derivatives of sugar are possible. Considering the extreme cheapness of sugar as a raw material, it is no wonder that in the last 20 years many industrial and government laboratories

have been intensively investigating the industrial possibilities of common table sugar.

Since 1929 more than 200 patents have been taken out on the conversion of sugar and its derivatives into plastics and other products. Most of these substances are still in the laboratory stage but some are being manufactured and many more are on the way. Lactic acid, produced in sugar refining, is the base of alkyd resins which are made into automobile finishes. The "paint" on your car is an alkyd resin.

From lactic acid the chemists of the Eastern Regional Research Laboratory have prepared a new synthetic rubber named "lactoprene." Gaskets, rubber heels, bottle stoppers, rubber cement and hundreds of other goods can be made from lactoprene. Lactoprene will take its place as one of the synthetic rubbers that will free the United States from dependence on the rubber of war-threatened Malaya.

The conversion of sugar into substitutes for proteins like meat has actually been achieved. British scientists are keenly interested in this sort of research, for the British West Indies combine surplus sugar crops with tremendous overpopulation. Barbados, for example, has 996 people per square mile.

The British are making excellent progress, not through intricate chemical manipulations, but by biological means. Sugar is used as a medium for growing yeasts related to the common brewer's yeast. This yeast, *Torula utilis,* multiples 64 times in 9 hours. In other words, a single yeast cell will divide into about one billion new yeast cells in 10 hours!

At the experimental pilot plant in Jamaica, supported by the British Department of Scientific and Industrial Research, nitrogen is added to a solution of molasses. Molasses, as everyone knows, is a by-product of the extraction of sugar from sugar cane. The yeast converts the molasses into a food containing about 50 percent protein which is rich in vitamin B. This food is a cream-colored powder with a meaty flavor that can be

used in bread, soups and vegetable dishes. Six ounces will supply the average man with his daily requirements for protein and the B-vitamins.

Plants turning out more than 500 pounds per day of the new yeast food are now in operation in the British West Indies, and other plants are being built in Porto Rico, South America and South Africa. Estimates indicate that the new food will cost less than 10 cents a pound. Taste is the main obstacle to its widespread consumption but that difficulty will be overcome. Hundreds of species of yeast are known and, doubtless, thousands of strains can be created by X-ray mutations. We may have dozens of yeast flavors from roast beef to vanilla! Sugar-grown yeasts would then become a household staple the world over and the menace of world starvation would be ended.

Transforming sugar into rubber, plastics, gasoline, varnish, meat substitutes and a host of other useful commodities is a sample of the creative powers of modern science. — *From Science Digest.*

PEACE

What kind of peace do I mean and what kind of peace do we seek? Not a Pax Americana enforced in the world by American weapons of war. Not the peace of the grave or the security of the slave . . . but genuine peace . . . that makes life on earth worth living—the kind that enables men and nations to grow and to hope and to build a better life for their children—not merely peace for Americans but peace for all men and women—not merely peace in our time but peace for all time. — *John F. Kennedy*

■ Fear, nerves, tension have been known to affect health and vigor.

ANXIETY AND ILLNESS

He came into the hospital one Monday: a man whose arms were pimpled with a bothersome skin disease. "Almost every Monday I have a breaking out like this," he said.

"What do you do on Sundays?" asked the doctor.

Usually, said the patient, he visited a young lady. It developed that for some years the couple had been engaged, but the woman repeatedly postponed naming the wedding day. Each Sunday the man pressed for a decision; each Monday was the day after a frustration. And "almost every Monday" his skin protested his anxious state by breaking into eczema.

To the same big eastern hospital came a man critically ill with asthma. After weeks of treatment he was relieved, and a day set for his discharge. Suddenly, on the night before his scheduled departure, all his former dangerous symptoms returned. Treatment was resumed; again his breathing became free; again arrangements were made for the journey. And again asthma returned in full force.

The record showed that this patient was a college teacher who had become embroiled in a faculty fight and feared for his job. Here was a situation of uncertainty such that it seemed better to remain within the protecting walls of the hospital than to go back to the scene of former strife and face the likelihood of dismissal.

Obviously in these cases there was more than the physical condition; there was also a mental or emotional disturbance which had its counterpart in the physical mechanism.

Medical men have long called certain ill-understood

symptoms "functional," thereby segregating them from "organic" diseases in which the ailing organs show anatomical defects. A headache that can be correlated with a brain tumor is an organic disturbance, but a headache that plagues its victim without traceable connection to any structural fault is "merely functional." Many a blaffled doctor disposes of "functional" cases with the pronouncement, "You only imagine you are sick. Quit worrying, go home and forget it."

Such advice rarely is effective. And labeling such cases "psychoneurosis" does not dispose of the patients, who drift from one doctor to another, eventually perhaps to a faith healer, and some night may show up at a testimonial meeting, cured.

On the other hand, the neurotic may chance to apply to a physician who considers the patient as a whole. The old-time family physician was often of this school, and Dr. S. Weir Mitchell was a shining practitioner of its art in the 19th century. Scientifically trained doctors practicing it today, while growing in number, are still few. It is only within recent years that study of the emotions as factors in illness has received serious attention in medical schools and research centers, and it is being discovered that in a wide range of disease emotional states show themselves to be a complicating, often a controlling, influence.

In 1934 Dr. Flanders Dunbar and her associates at the Presbyterian Hospital in New York began investigating possible emotional factors in two widely different kinds of diseases, both generally related to organic impairment: diabetes and diseases of the heart. In each group emotional factors were found to affect more than half of the patients. In times of emotional disturbance the diabetes was worse and the cardiac symptoms intensified.

There is increasing evidence that pent-up, repressed anxiety which cannot be discharged in action is discharged in the form of disease. In many cases of high blood pressure no organic cause can be traced. And even when there is a definite organic cause, the patient of-

ten responds directly to improvement in his emotional state.

Dr. Erwin Moos reports the case of a man with a systolic blood pressure of 280, who was also afflicted with a lung disorder, and whose urine showed traces of albumen. Rest and drugs brought no beneficial effect, but one day the patient remarked that he had done great wrong to his estranged wife. The doctor immediately arranged a meeting, and after a friendly discussion between the two, the man's blood pressure fell to 150, his lung symptoms abated, and the albumen disappeared. Several years later the patient was in good health with a blood pressure of only 130.

The whole physiology of anxiety is bound up with the idea of protection, and has its origins far back in human history. How to save one's skin was a supreme problem of primitive man. Every day there was the necessity of taking strong action either in fighting or fleeing. These demands gradually built into the body an automatic scheme of swift adjustment for action.

In time of fear or anger powerful changes go on within the body: the heart muscles are stimulated to more rapid pulsations, circulation is shifted from the stomach and intestines to the heart, brain, lungs, and skeletal muscles — all resources are mobilized for most effective fight or flight. The mechanisms of these automatic reactions are largely chemical — caused by powerful substances secreted by the glands and the nerve endings. And every impression from the outside world that threatens the security of the individual, that provokes him to anger or inspires him to fear, automatically calls into play this complicated biochemical mechanism to prepare the body for action.

Now the man who has just lost his fortune in a bank failure suffers a fear just as real as was the fear of a cave man confronted by a wild beast. However, whether the cave man ran, or stood and fought, he needed the stronger heartbeat, the change in blood

distribution. But to the victim of the bankruptcy these adjustments are superfluous. They prepare him for action which does not take place. They glut his system with powerful substances he does not need, and which cause internal conflict. Such conflicts tend to be suppressed, but the fact that they are unconscious does not mean they are innocuous. Quite the opposite. The poisoning effect of a source of anxiety seems to increase in inverse ratio to the victim's awareness of its identity. — *G. W. Gray, from Harpers.*

THE HUMANITY IN ME

What I call my character or nature is made up of infinite particles of inherited tendencies from my ancestors — those whose blood runs in my veins. A little seed of laziness from this grandfather and of prodigality from that. Some remote grandmother perhaps, has stamped me with a fear of horses or a love of dogs. There may be in me a bit of outlawry from some pirate forefather, and a dash of piety from one who was a saint.

Religion is not a personal affair so much as it is communal. You are a Jew because you were born a Jew; for the same reason you are a Catholic, you are a Presbyterian, you a Buddhist, you a Mormon. As we enter life we find these cells already made in the human beehive and crawl into them.

Original ideas? Where will I find them? All the ideas there are exist now, floating in the human sea. I, an oyster, absorb a few, and call them mine. Even the phrases of the Lord's Prayer have been traced to Talmudic sources....

Let us, therefore, put away coarse egotisms and partisan passions, and learn to love humanity, to think and feel in terms of humanity. — *From Four Minute Essays, by Dr. Frank Crane.*

■ A considerable contrast between the few women of wealth and the rest of the women population.

THE PAKISTANI WOMEN

As one travels through the crowded bazaars and congested city streets of Pakistan, fifth most populous country in the world and the most influential Islamic country, he sees only men except for an occasional beggar woman or a spook-like figure shrouded in a loose garment from head to toe. Since there are nearly a hundred million people in this Muslim country, approximately half of them must be women. In the Islamic religion, however, the female is regarded as inferior and relegated to a subordinate role in life. She is secluded behind the walls of her father's home until an arranged marriage releases her only to live out her life behind the walls of her husband's home.

Not all women fare alike, however. Those of the wealthy and influential class, while small in number, move about freely and lead pampered lives. Not many of the elite still practice purdah. Since servants are plentiful in this land of massive unemployment, the ladies of this class devote their time to entertaining themselves and their husbands and, of course, to child-bearing. They have been educated in private schools, sometimes speak several languages, are often excellent at bridge and other games, and are fond of traveling.

This privileged minority is a minute fraction of the female population. The vast majority live in villages where news of events in the outside world seldom reaches them and where even a bamboo hut has a bamboo wall around it. By any standards the masses of Pakistan are a depressed people. City dwellers and villagers alike suffer from grinding poverty and ignorance. They are orthodox Muslims.

If a woman of this group

appears on the streets, she wears a *burqua,* a two-piece garment consisting of a full skirt and a cloak with a hood. The hood has small peepholes for the eyes, but vision is partially obstructed so that often the wife is led by her husband.

A third group should also be mentioned. Beggar women appear on the streets clad in tattered saris, often clutching emaciated babies. Occasionally an insane woman, stark naked, may be seen but these are indeed the unfortunates.

Substantial improvement is being made in the lives of Pakistan's women, however. President Ayub Khan, in power since the army took over in 1958, has been responsible for establishing certain family laws which provide for and protect the rights of women. Although he came to power as the result of a military coup, he has established a program of "Basic Democracies" designed to carry self-government into the villages. Ironically, when the Assembly was reconvened in 1962, one of the first bills provided for the repeal of the law which prohibited polygamy. The fact that women demonstrated in protest in front of the Assembly showed that they were ready to fight for their rights. The bill did not pass. Indeed a few seats in the Assembly are occupied by women.

The key which is opening new frontiers for women is education, whether the frontier be the other side of the home walls or the campus of a university on the other side of the globe. Pakistan is now in its second five-year plan for education.

Many women students are attending Pakistan's universities and the colleges and universities of the United States and other countries. Who has not seen their colorful saris fluttering on the campuses? There are women professors in the universities of Pakistan and women in the medical and legal professions. A few women have established fabric and dress shops. The mass of Pakistan's women, however, are in the villages. Their traditional way of life will become modern in direct proportion to the effort the

central government puts into education.

A concern for the underprivileged is developing among the previously mentioned elite as evidenced by the work of such organizations as the All-Pakistan Women's Association and The Women's Voluntary Association of East Pakistan. A delegate to a world conference of women's club in Japan returned to Dacca and made the following comment in her report to her local club, "I asked a Japanese woman why her country is so prosperous while ours is so poor. She replied, 'Here we all work. How can you expect to move ahead with half your population, your women, asleep.' "

While education is the key to progress in Pakistan, overpopulation is the deterrent. Economic and educational gains have been offset by the increase in population; thus, Pakistan can increase the gross national product, but the standard of living changes little.

Nature's cruel methods of population control — flood, famine, and disease — must be replaced by education and birth control. Women have the most to gain in this struggle. The inertia of centuries may be overcome if there is a realization that a better way of life is possible. — *From Delta K. G. Bulletin.*

■ **The power of a mind to keep the memory of sounds in years of deafness.**

IF I HAD THREE DAYS TO HEAR

My young friend, Virginia, has asked me what I would do if, for three days, I could hear again.

Many long years ago, when I learned that I was to be totally deaf for life, I promised that when I entered this "silent world" I would carry with me such vivid memories of sound that the loss of hearing would never become unbearable.

Yet as the years passed, those memories dimmed—and now I can no longer watch a bird's throat swelling in song and hear the music in my mind. So, if I had granted to me three days of perfect hearing, on the first day I would search for, and listen to, sounds I have never heard. I would listen to a giant plane as it zoomed across the sky and disappeared—a tiny fleck against fleecy clouds. I would know the song it sings to my son who is a flier.

I would turn on a radio and pray that I would hear Bing Crosby singing *White Christmas*, as I marveled at the miracle of broadcasting.

In the evening of that first day, I would seek out a symphony orchestra, and I would remember great voices —those of Caruso, Schumann-Heink, Mary Garden—as I listened to the mellow tones of the cello.

At dawn the second day, I would wander into fields and woods, searching for a little brook that would talk to me as it murmured over moss-grown rocks.

I would hark to the wind sighing among trees and grasses; I would listen for the call of a lark, the chirping of robins. And at dusk I would hear their sleepy twittering as they settled for the night.

Then, in the black-dark hours, I would hear the stealthy sounds of things

moving in the night, and I would fall asleep to the sound of rain pattering on my roof, and when I wakened it would be the third and last day of hearing, so...

At dawn, I would seek one sound to which I would listen all the day, and I would engrave that sound so deeply on my mind and heart that I would be able to hear it forever and ever ...

I would hear and listen and thrill to another sound which I have never heard —the voice of my son. — *Lucille Griswold, in Coronet.*

KINDNESS COSTS SO LITTLE

All of us can give appreciation, kindness, interest, loyalty, understanding, encouragement, tolerance—and a score of other little portions of ourselves. Each of us should "major" in the items in which we are "long," and fill in with the others. Suppose I am passing a neighborhood store in which I notice a particularly attractive window display. I say to myself, "someone put real thought into trimming that window, and he or she ought to know that at least one passerby appreciates it." So I stop in, ask for the manager, and compliment him on the display.

I find it always pleases a merchant to know that his windows are noticed, even though I may not buy a penny's worth of the merchandise displayed in them. In one instance the clerk who trimmed the windows I praised received a raise in pay as a result of my compliment. — *David Dunn*

■ New sources of protein for food.

FROM CRUDE PETROLEUM

Synthetic foods that taste like meat and fish are being developed experimentally from crude petroleum oil to meet the world's mounting food needs, a French scientist reported.

Dr. Alfred Champagnat, of Courbevoie, France, reported on research with crude oil at a symposium during the 150th national meeting of the American Chemical society. Two other scientists told of other food producing processes using bacteria and fungi.

Champagnat said microorganisms produced from crude petroleum contain more than 50 per cent usable protein that can be converted into products tasting like fish and meat.

"Potential protein production by the petroleum industry could reach twenty million tons a year — half the anticipated protein requirements for the world's food needs in 1980," he said. "A pound of petroleum will produce a pound of protein."

Champagnat said the petroleum-produced protein concentrates probably will first be used to supplement cereals fed to cattle. Later, depending on the outcome of tests on animals, its use could be extended.

He noted that the production of proteins through this method would be less expensive than by current methods.

Dr. William Gray of Southern Illinois university told the symposium that fungi—such as mushrooms, mildews and molds—could be used as efficient "protein factories" to feed billions.

"The fungi could significantly multiply the protein-producing capacity of several food staples, including rice, sugar cane and manioc," he said.

Gray said when the plants are ground or minced and added to a liquid medium containing fungi and inorganic fertilizers, the fungi convert the plant's carbohydrates into protein. The protein-containing fungi are then dried and made into flour, flakes or pellets.

The fungal conversion process could increase the protein yield from manioc from three to six times the amount produced normally on farm acreage," he added. "Even a tripling of yield could provide enough protein for the total annual protein requirements of 434 million people."

Gray said if rice were used instead of manioc, the fungal conversal process could manufacture enough protein to meet the needs of another 1.8 billion people. Using sugar cane and beets, it could meet the protein requirements of another 581 million people.

Another researcher, Dr. Stephen R. Tannenbaum of the Massachusetts Institute of Technology, discussed the production of protein from bacteria.

He said cells of bacteria grown in culture on various complex carbon sources can be processed to yield a 60 to 70 per cent protein concentrate with a composition similar to that of cow's milk protein. — *UPI*

CONSTITUTIONAL JUSTICE

How absurd an ambition for a people to attempt, by a written constitution, to "establish justice"! It is an ambition to make lawyers laugh and philosophers weep. — *D. W. Brogan in The American Character.*

ALBERT SCHWEITZER

A great and noble figure, that was Albert Schweitzer who died some days ago at the ripe age of 90. A philosopher and humanist the civilized world called him. He spent about 60 years of his life as a medical worker in a primitive community in Africa where sickness, poverty, and ignorance made havoc on the lives of its Negro population.

His talent as a musician and scholar was such that he could have established himself in any country in Europe in peace and comfort among the famous figures of this century. But he chose to devote his energies and abilities to the lonely and forgotten inhabitants of a neglected region of the earth.

He built his own simple hospital and quarters in the forests without any financial assistance from governments, foundations, or wealthy patrons. It was his theory that people are best served right in their own surroundings without unnecessarily introducing strange practices which they would not be able to follow to advantage.

Forgetting himself in his humanitarian mission, he nevertheless received universal acclaim in the role he took. He did not go around looking for medals, decorations and honorary degrees as do men of lesser breed and picayunish minds in their egoistic struggle for fame and reputation. Without expecting it, he was awarded the Nobel Prize.

In one of his works, "The Philosophy of Civilization," we read these transcendent ideas which are worth pondering:

"The disastrous feature of our civilization is that it is far more developed materially than spiritually. Its balance is disturbed. Through the discoveries which now place the forces of Nature at our disposal in such an unprecedented way, the relations to each other of individuals, of social groups, and of States have undergone a revolutionary change. Our knowledge and our power have been enriched and increased to an extent that no one should have thought possible. We have thereby been enabled to make the conditions of human existence incomparably more favourable in numerous respects, but in our enthusiasm over our progress in knowledge and power we have arrived at a defective conception of civilization itself. We value too highly its material achievements, and no longer keep in mind as vividly as is necessary the importance of the spiritual element in life. Now come the facts to summon us to reflect. They tell us in terribly harsh language, that a civilization which develops only on its material side, and not in corresponding measure in the sphere of the spirit, is like a ship with defective steering gear which gets out of control at a constantly accelerating pace, and thereby heads for catastrophe."

In his life and work he proved that a man can find fulfillment in a pursuit after the spiritual side of civilization by making use of material factors derived from discoveries of the forces of Nature. His life-long career supported the sincerity of his words. The admiration, reverence, and respect he recieved from different corners of the earth indicate the great value of his thoughts which he translated into noble deeds. — *V.G.S.*

GROWTH AND HONESTY

The other day I met a highly experienced leader in community training who informed me about the problems he finds in his work with Filipinos both young and old. As a man who loves his people and is determined to succeed in the important assignment entrusted to him, he has taken up his work with a serious purpose and a will to overcome the varied obstacles on the way. With his usual way of analyzing the problems which he expects to meet, he confided to me that what makes the solution of most of them very difficult is the low regard which our people have for honesty in most of their work and in their social relationship. All of them speak highly of honesty. But in their personal dealings with others, they do not act honestly. In fact, they do not feel that dishonesty is inherently wrong. To them cheating is not always abhorrent. One who acquires a fortune through dishonest means is as respected in our society as a person who observes the moral rules as faithfully as he can. There is no social stigma a dishonest person receives from dishonesty that closes the door of so-called respectable clubs and the friendship of decent families to him.

But a community, a town, or a barrio that is addicted to dishonesty in its general behavior, this gentleman observes, acquires not only a bad moral reputation but also a distinct economic disadvantage. Its material growth gets stunted. People outside tend to avoid doing business within it. Its land values do not improve. It experiences a general social anemia, and finds itself shunned by people who are interested in a decent, clean, and safe environment. — *V.G.S.*

Attention: All organization heads and members!

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