

## ***More Secrets from the Atom***

**W**ORLDWIDE recognition has been won by two Chinese-born scientists, now permanent residents of the United States. They have received both the 1957 Nobel Prize for Physics awarded at Stockholm, Sweden, and the 1957 Albert Einstein award in science, awarded in New York. The joint winners of these distinguished awards are Dr. Chen Ning Yang, 34, of the Institute for Advanced Study at Princeton, New Jersey, and Dr. Tsung Dao Lee, 30, of Columbia University, in New York City.

These two young scientists received these awards for their "profound investigations of the so-called parity laws which have led to important discoveries regarding sub-atomic particles." Their research has disproved one of the basic laws built into all physical theory for the past 30 years.

Using the new giant atom-smashers, the two scientists studied the behaviorism of components of the atomic nu-

cleus and advanced the theory that some of these sub-atomic particles should not be expected to behave according to previously conceived rules. Experiments at Columbia University and at the U.S. National Bureau of Standards in Washington, D.C., have verified that some of the particles do indeed have different intrinsic properties. This is expected to open the way to a unifying theory to explain many of the mysteries of the atom. Some promising theories have until now been blocked because they run counter to the parity law.

Dr. Lee and Dr. Yang have been friends for many years. They first met at the University of Kunming, China, in the early 1940's. They resumed their friendship at the University of Chicago in 1948. Since 1951, they have collaborated closely on sub-atomic researches. Dr. Lee, youngest full professor on the faculty of Columbia University, has been on leave while working with Dr. Yang.

## Panorama Quiz

One mark of an educated man is the possession of a reasonable fund of general information. The highly specialized individual, often dubbed an "expert," frequently knows little or nothing outside his own line. Try yourself on the following questions, then turn to the next page for the correct answers.

1. The U.S. rocket **Pioneer** failed in its attempt to reach the moon, but before falling back to earth, it went out about: **A. 180,000 miles; B. 6,000 miles; C. 79,000 miles; D. 2,000 miles.**

2. Little known is the fact that dynamite was invented by this well-known figure: **A. Rockefeller; B. Nobel; C. Carnegie; D. Confucius.**

3. All of the following, except one, are among the seven wonders of the ancient world. Which one? **A. Great Walls of China; B. Pyramids of Egypt; C. Colossus of Rhodes; D. Hanging gardens of Babylon.**

4. In sports the immortal name of John L. Sullivan is remembered as: **A. the first great football player; B. the originator of hockey; C. the greatest name in car racing; D. the first heavyweight boxing champion of the world.**

5. The largest lake in the world, measuring 170,000 square miles, is: **A. Lake Michigan; B. Aral; C. Caspian; D. Baikal.**

6. In Japan, your dollar would fetch, at the official rate of exchange: **A. 360 yen; B. 8 yen; C. 1,200 yen; D. 100 yen.**

7. The French expression vis-a-vis, widely used in English, literally means: **A. away from; B. atop; C. contrary to; D. face to face.**

8. A member of the Nacionalista Party, this fighting senator has hugged the local limelight for his expose of Administration graft and corruption: **A. Senator Lorenzo Tañada; B. Senator Mariano Jesus Cuenco; C. Senator Claro Recto; D. Representative Bartolome Cabangbang.**

9. Dacca, where the speaker of the legislature was killed following a riot recently, is a city situated in: **A. India; B. East Pakistan; C. Ceylon; D. Kashmir.**

10. Of course you know that abattoir is just another term for: **A. customs; B. slaughterhouse; C. guardhouse; D. air or train terminal.**

ARE YOU WORD WISE  
ANSWERS

1. B. to overpower by intense light
2. A. sudden collapse
3. C. to search thoroughly among contents
4. B. to distort in pain
5. A. to produce
6. C. dependent upon something uncertain
7. C. poor
8. B. beyond ordinary knowledge
9. D. ill-humored
10. A. to agree

PANORAMA QUIZ  
ANSWERS

1. C. 79,000 miles
2. B. Nobel (of the Nobel Prize fame)
3. A. Great Walls of China
4. D. the first heavyweight boxing champion of the world
5. C. Caspian (in the U.S.S.R. and Iran)
6. A. 360 yen
7. D. face to face
8. B. Senator Mariano Jesus Cuenco
9. B. East Pakistan
10. B. slaughterhouse

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**Pigeon Service**

**A** CARRIER pigeon express service has been started by the Japan Pigeon Communications Association. The specially trained pigeons will be rented to fishermen and mountain climbers.

Carrier pigeons are frequently used by Japan's major newspapers to expedite the delivery of news stories and film.

The association plans to establish pigeon bases at about fifty fishing ports. Each base will have 50 to 300 pigeons.

In tests conducted in nearby Chiba Prefecture the pigeons have been successfully used in carrying message of fish school sightings back to the village elders.

For a fee mountain climbers will be able to rent pigeons at the foot of the popular excursion mountains in the Japan Alps to relay word in case of emergency. Mountain deaths of high school and college boys and girls are rather frequent in Japan.

The birds will be trained to fly 400 kilometers (about 250 miles) in unfavorable weather or at night.

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## In the Beginning. . .

**FULCRUM** (support or point of rest on which a lever turns in a moving body)

Strangely enough, the origin of this word is from the Latin meaning "bedpost"!



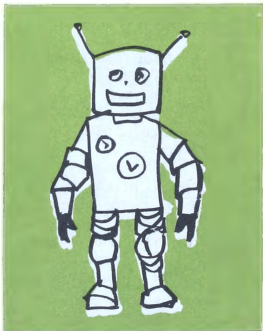
**ROBOT** (a machine-made man)

First used by Capek in the play "R.U.R.," the term robot comes from the Czeck *robotnik* meaning "serf."



**SHAMPOO** (a preparation for washing the hair)

From the Hindu *champna*, meaning literally to "squeeze or press" comes this modern word.



## COTABATO: PROMISED LAND

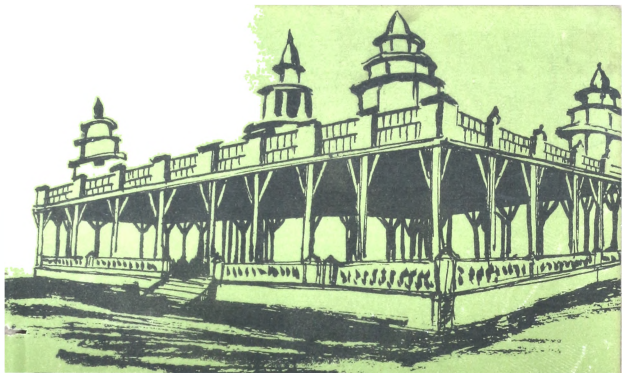
COTABATO is the biggest and potentially the richest province of the Philippines. At present it is a vast expanse of forest and fertile land, fed and made more fertile by the second longest river in the Philippines—the Rio Grande. The marshes and swamps along the river, if converted into fishponds, could supply the entire archipelago with fish. Its vast plains if converted to ramie plantations could produce enough fiber for twice the population of the Philippines. The rich alluvial soil along the river if properly cultivated could feed the entire nation.

As it is Cotabato is just growing. A Malabon entrepreneur who constructed a group of fishponds near the mouth of the river has to charter a plane to bring his fish to Manila. The ramie plantation at Buluan keeps the Japanese textile mills continuously supplied with fiber. And the corn produced by the mechanized farms is sold

in the Visayan markets. And yet, one feels that the present level of production has hardly touched the fringes of its vast potential wealth.

The Rio Grande is the most important transportation lane of the province. This river in spite of its size is shallow in many parts. Thus transportation is crude and expensive; and thus the cost of commodities that go in or out of the province rises almost automatically. Road building in Cotabato is just starting and the bureau of public works estimates that it might take another decade before the province is provided with an adequate system of land transportation.

Probably because of this one gets in Cotabato a sense of feverish impermanence. It is as if those who are engaged in the extraction of its wealth feel that their days are numbered and therefore they have to get what they want with almost hedonistic frenzy. The pulse of life here is unnatural;



it lacks the evenness and rhythm that usually goes with seasonal pursuits.

**T**HE CENTER of the province is Dadiangas now called General Santos, in honor of the late General Paulino Santos who opened the territory for settlement. Dadiangas has more than 45,000 inhabitants. The town nestles in an area that produces coffee, corn and cotton in abundant quantities. The original 3,000 settlers who came with General Santos in 1939 had spread to Ala Valley, Koronadal, Lagao and Marbel. Their struggles against locusts, malaria and poverty are now paying off. They now own farms that are worth a hundred times more than their original value.

Cotabato can very well be called the melting pot of the Philippines. Here people from all groups live together—Ilongos, Cebuanos, Tagalogs, and Maguindanaws. They have raised towns that they have purposely named after the places of their birth—New Capiz, New Iloilo and New Cebu. But the houses of the settlers in these new towns are uniformly drab and makeshift. Newness is equivalent to impermanence. However, nobody seems to be bothered by hard gruelling labor because here work is the rule of existence.

Like Sulu and the coastal regions of southern Mindanao, Cotabato was settled before and during the Spanish regime by Malays and Indonesians. In the 15th century, the Malayan

settlers in the province were converted to the Moslem faith by Sariph Kabungsuan, an Arab-Malay imam who visited the region with traders. Like the rest of Moroland, Cotabato has never known the domination of the Spaniards.

The Americans however were able to subjugate the Maguin-danaws. This was the beginning of the progress of the province. With the establishment of the rule of law in the province, settlers from all over the Philippines emigrated to the province.

Agriculture is the basic industry in the province. The farmers of Cotabato are now beginning to realize the advantages of mechanization. The cotton and coffee plantations are now mechanized.

**B**UT THE crop that Cotabato has claimed for its own is ramie. This remarkable fiber thrives very well in the porous soil of Cotabato. Ramcor, the biggest ramie plantation in the Philippines, covers an area that stretches from one horizon to another. The corporation sends its fiber down the Rio Grande to steamers waiting at the mouth. The fiber is sent to Japan for processing and weaving. Ramcor is planning to put up its own plant soon.

The biggest problem of Co-

tabato is rats. The rice-producing area of the province is periodically attacked by hordes of rats. The government is doing its best to eliminate the pest.

Another big problem of Cotabato is the cultural conflict between the Moslems and the Christians. There seems to exist among them a feeling of mutual distrust. This distrust sometimes erupts into bloody battles. One still remembers the massacre on Tigkawayan when a group of Christian settlers descended upon a moro village and practically wiped it out.

The basis of this conflict is economic. The datos, fearful of loss of power, still wish to assert their authority over the christian settlers. Once an area is cleared and planted, a datu would demand its return. The Christian, quite naturally, would defend his right and a fight would start. However, the Philippine Constabulary has the situation well in hand and now even the powerful datos think twice before they decide to tackle this band of professional soldiers.

Cotabato is the promised land of Mindanao. Properly directed, it could become one of the Philippines' most important provinces. The industry of the pioneers in Cotabato would surely transform that province to an economic force.

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