WHO'S NEWS THIS WEEK

By LEMUEL F. PARTON

NEW YORK.—Mahatma Ghandi has indicated that, in his opinion, a world war against Adolf Hitler would be justifiable and possibly necessary. The British, with their imperative job of keeping their great Indian empire in hand, probably aren't worrying about Gandhi. More important is the attitude and activity of his vigorous and popular understudy, the 44-year-old Pandit Jawahharial Nehru. The latter has been boldly resistant to British rule, spent six years in jail, and has acquired popularity and leadership as Gandhi reaches his seventy-second year.

Understudy of Gandhi Calms Toward British

Meager news reports from India indicate that Nehru has been calming down in his agitation against British imperialism, and that, a few weeks ago, he was vehemently denouncing fascism and the new German aggression. London is reassured, but watchful, as Asia may become a balance of power in the clash of world dominions and Nehru has been an active propagandist of pan-Asiatic doctrine, summoning browns and blacks to resist what he believes to be the aggression of the whites.

Born of a noble caste, Nehru was educated at Harrow and Cambridge, taking honors in the classics. His father, the Pandit Motilal Nehru, was a lawyer and the richest man in Allahabad. He gave away his mansion and moved into a shabby little house when he became a convert to Indian nationalism.

His son, reared in splendor, had no such ideas when he came home from England. He was a strong supporter of the British regime until the Amritsar massacre of 1919. Then he burned his 50 British suits, donned native dress, and became an agitator for the Nationalist cause. However, he was no devotee of loin-cloth asceticism. He was all for fighting and it was as the most belligerent of all the Indian leaders that he came to the presidency of the all-Indian congress in 1935.

Nehru was at times sharply opposed to the non-resisting Gandhi, but apparently their differences have been resolved. He is handsome and engaging, a vigorous assailant of the ancient caste system of India.

IT WAS not until a year ago that Romain Rolland returned to France, after more than 20 years' exile in Switzerland. He had opposed war. Several years before he finished "Jean Christophe," Tolstoi had called him "The Conscience of Europe." He is a pallid old man now, with thinning hair and sad, deep-set eyes, but still "above the battle" and still trying to arouse the conscience of mankind.

'Lamplighter' Sees Hope Only In 'Inner Light'

He dispatched to the New York international congress of the American Musicological society a message of good will. It is quoted here in accord with this department's wartime alertness to such men and messages. He says:

"In the field of art, there is not—there should not be—any rivalry among nations. The only combat worthy of us is that which is waged in every country and at every hour, between culture and ignorance, between light and chaos. Let us save all the light that can be saved. There is none more refulgent than music. It is the sun of the inner universe."

It was this sun that illumined "Jean Christophe," one of the greatest books of all times, published here just before the World war, profoundly moving to multitudes of Americans as an avocation of the creative and aspiring spirit of man. Many times in recent years, Romain Rolland has written that the world had little hope of escaping another and possibly last devastating war. But, described as "an old man, broken and despairing," on his return to France last year, he has continued his plea for peace, decrying hatred, pleading for understanding.

His has been a lone voice, never identified with "movements," or political groupings, right or left. He opposed Henri Barbusse and his Clarte group, and the various "united fronts," as he did the leaders of violent reaction on the right.

He was educated in music at the Ecole Normale, became a devotee of Wagner and then of Tolstoi and Shakespeare. He is the evangel of the humane spirit in a day when it is hard pressed.

(Consolidated Features—WNU Service.)

Island of Apocalypse

Tourists on Mediterranean cruises have the chance not only to see Palestine but to visit Patmos, the little island where Saint John received the visions recorded in the Book of Revelation.

Milk on the Hoof

In Sicily there is no milk problem for visitors daily see milk delivered "on the hoof." Goats are driven to one's door and their milk is drawn from them before the customer.

Edmund Ruffin, Known as Man Who Fired First Shot at Fort Sumter, Should Be Famous as "Father of Soil Chemistry"

George Washington overseeing farming operations at Mount Vernon.

By ELMO SCOTT WATSON
(Released by Western Newspaper Union.)

A KEEN-EYED young man worked in an improvised laboratory over samples of soil he had taken from his upland farm. As he tested the reactions from the chemicals he applied to the earth, he jotted down notes in a little book and a look of satisfaction lighted his thin face.

The time was the spring of 1818. The place was Coggin's Point in the tidewater area of Virginia. The young man was Edmund Ruffin, America's first scientific farmer, who was to be known to later generations as the "father of soil chemistry in the United States."

First man in this country to make a chemical test of the soil and to point the way toward modern soil science, Edmund Ruffin was also to be known to history as the man who fired the first gun at Fort Sumter in 1861 and precipitated the Civil war.

More than a century after his revolutionary experiments, the contributions of Edmund Ruffin to present day soil knowledge and conservation were recalled by Prof. Emil Truog, professor of soil in the University of Wisconsin in his presidential address recently before the American Society of Agronomy.

"Edmund Ruffin, born in 1794," said Professor Truog, "was in youth, frail of health and restless of spirit. He read much of whatever came to hand and grew up in almost complete ignorance of the practical agricultural tasks facing him."

A student at William and Mary college at the age of 16, a bridegroom a year or two later, and a private in the War of 1812, Ruffin assumed control of the Coggin's Point plantation in 1813. His father had died three years before.

Worn-Out Land.

A dreary prospect faced the young planter. The Ruffin land, like that of neighboring farmers, was poor, worn out by two centuries of bad agricultural methods. Tobacco was king in that pioneer farm economy, imposing a single crop type of agriculture in which, says Avery Craven's book, "Edmund Ruffin, Southerner," the sole object was immediate great yields regardless of future consequences. Such a system under frontier scarcity of capital and labor threw the burdens of abnormal production squarely upon the land in a region where soil formation was poor, rainfall heavy and concentrated and harmful micro-organisms unusually active.

American farmers had reaped a profitable living from furnishing food to Europe torn by the Napoleonic wars of the previous decade. But this lucrative market was closed by the Treaty of Ghent. Worn out farms were being abandoned by the thousands. The tide of settlement was turning west to virgin areas where land was cheap.

Although crop rotation was followed by a few of Ruffin's neighbors, such practices met with difficulties, for clover and legumes failed to grow on poor lands and this cut the supply of live stock and manure. The corn crop on Ruffin's farm averaged only 10 bushels to the acre. Wheat yielded no better than six.

For the next five years young Ruffin experimented, seeking a solution to his problem. He drained his swamp land and had good crops for three years. Then production so dwindled that he quit planting this acreage. He tried manure and got practically no beneficial results. He could not make clover grow. His crude plow made shallow furrows on the hilly land which became watercourses washing away the soil in rainy weather.

Disillusioned, but still eager to find a way out of his troubles, Ruffin came on a copy of Sir Humphrey Davy's book, "Agricultural Chemistry." He studied it closely and although he had no knowledge of chemistry, he soon grasped the fundamentals. His attention was drawn particularly to Davy's statement that a sterile soil "containing the salt of iron, or any acid matter may be ameliorated by the application of quick-lime."

The young planter found directions in Davy's book for testing soils for soluble iron, calcium and lime-bearing earth and also for testing limestone and marl for their carbonate content.

The Tests Begin.

He set to work immediately, gathered the necessary equipment and chemicals and began his tests. While he was not able to reveal the presence of free acids in his soil, he was able to prove the absence of lime. Then observing that sorrel and pine

EDMUND RUFFIN

were abundant on the poor soil, he came to the conclusion that "vegetable acids" were the cause of sterility in his land.

"Ruffin was probably the first man in the whole world," said Professor Truog, "to conclude that upland mineral soils are often acid due to the presence of free acids, made possibly by the absence of calcareous (lime-bearing) earths. He also held that all fertile soils are either calcareous or hold lime in combination with acids in such form that it is easily extracted with hydrochloric acid."

With the aid of the test for carbonates, Ruffin located deposits of marl on his farm and at other places in the neighborhood. He decided to put his theory to a practical test by supplying lime to his sterile soil.

Ruffin's epochal experiment in putting soil science to work for the first time attracted practically no attention in the neighborhood at the time. Yet it was to revolutionize the agriculture of his home state for the next generation and exert a profound influence on soil conservation as it is practiced today.

"On a February morning in 1818," says Craven, whom Professor Truog quotes extensively in his address, "Ruffin's carts began to haul marl that puzzled Negro hands, dug from pits hastily opened on his lower lands. They spread 200 bushels over a few acres of newly cleared, but poor ridge land and in the spring Ruffin planted this entire field to corn as a testing crop.

"Eagerly he waited. As the season advanced he found reason for joy. From the very start, the plants on marled ground showed marked superiority and at harvest time, they yielded an advantage of fully 40 per cent. The carts went back to the pits. Fields took on fresh life. A new era in the agricultural history of the region dawned.

"In October of that year, he presented to the agricultural society of his own county the first of what was to be a long line of valuable papers offered to the cause of agriculture. Stating his theories as to the 'nature of soils and the action of calcareous manures,' on them, he adduced the slender sum of his experiences to support what was in fact a revolutionary approach to the whole problem that vexed the farmers of the New World."

An Important Book.

Ruffin made further tests and expanded his knowledge, adding new facts and proofs to support his theory. In 1821 his paper, now enlarged and revised, was published in the American Farmer, a new agricultural journal published in Baltimore. Eleven years later, grown into a book of 242 pages, it was published under the title, "An Essay on Calcareous Manures." It ran through five editions and was described in the Year Book of the department of agriculture at the end of the Nineteenth century as "the most thorough piece of work on a special agricultural subject ever published in the English language." (The book by Sir Humphrey Davy which so influenced Ruffin had not yet been published at the time of his death in 1799.)

President John Tyler, himself a Virginia planter, declared that Ruffin's essay "in its valuable consequences would be worth more to the country than all the state papers that have been the most celebrated of our time."

An example of what Ruffin accomplished a century ago by the practical application of his soil tests and by preaching the philosophy of soil improvement may be found in the fact that from 1838 to 1850 the land values of tidewater Virginia increased by over $17,000,000. One estimate, according to Avery Craven, placed the total increase from the application of marl after 1820 at over $30,000,000.

Ruffin had a number of noted predecessors in the study of soil management. Leading among these was George Washington, says Professor Truog, who was thoroughly familiar with the agricultural writings of the foremost English authorities of his time. Yet the Father of His Country, was unable to increase production materially or even maintain the level of soil fertility at Mount Vernon.

"Washington practiced soil erosion control to a certain extent," Professor Truog points out, "took pains to conserve animal manure, went to great labor in fertilizing with mud obtained from creeks and marshes and spent much money in the purchase of special seeds.

Political and economic questions occupied most of Ruffin's time in the last 20 years of his life. He was an uncompromising advocate of slavery and became an ardent secessionist. He fired the first shot at Fort Sumter on April 12, 1861, and took an active part in several battles of the Civil war.

"After Lee's surrender," says Professor Truog, "Ruffin, at the age of 71, feeling that now he was a man without a country and too old and weary to be other than a burden of his children, with stern logic caused a shot to ring out that he might join his comrades who died in battle for a lost cause."

Although a century has passed since Ruffin's achievement and 50 years have elapsed since Wheeler's demonstrations, we are still today applying only a fraction of lime to soil we should, Professor Truog points out.

"Moreover, today we have tests of considerable refinement for determining the lime needs of soils; lime or marl has been located in nearly every section of the country; highly efficient machinery has been developed for grinding limestone and digging marl; facilities for transporting the lime to the farm where needed have been developed beyond the fondest hopes of 25 years ago; we have data almost without end showing that the use of lime is fundamental in the humid regions to the growth of legumes, to nitrogen fixation, to a favorable availability of soil phosphates, and finally to soil conservation itself.

"We ride about the country and pass through sections where the eye meets out crops of limestone in every direction, but alas due principally to an acid condition of the soil, there are no fields of alfalfa, sweet clover or other high-grade legumes which are so necessary for the creation of a land of 'milk and honey.'"

Edmund Ruffin, he says, had the answer to farmers and even agronomists who sometimes say that liming is too expensive:

"We never calculate the cost of any old practice," Ruffin once wrote. "We are content to clear woodland that afterwards will not pay for the expense of tillage. —But let any new practice be proposed and then everyone be-

PROF. EMIL TRUOG

gins to count the cost—and on such erroneous premises that if applied to every kind of farm labor, the estimate would prove that the most fertile land known could scarcely defray the expense of its cultivation."

Pointing out that agronomists in particular, in addition to promoting the use of lime, should encourage also the use of fertilizers generally, the furthering of soil conservation and the adoption of proper land use programs, Professor Truog said:

"Soil and lime testing, crude as it may have been, was what made possible Ruffin's monumental world in the field of soil acidity, liming and soil management. And if soil testing was practicable in Ruffin's day, it should be even more practicable today when so much more is known relative to the many factors involved.

"After 25 years of continuous experience with soil tests, I am convinced that with further study and improvement, they will in time be generally used by all agronomists in diagnosing the lime and fertilizer needs of soils devoted to agriculture. I envisage a time in the near future when conditions and the supply of plant nutrients devoted to intensive culture will be controlled by means of tests much like similar matters are controlled in a chemical factory. Then and only then, can we say that we are putting chemical soil science fully to work in a practical way.

"Some agronomists become greatly disturbed when fertilizer applied on the basis of soil tests does not give sufficient crop increase the first year to pay for the fertilizer. They seem to forget the all-important long-time benefit, namely that of maintenance of soil fertility which is the backbone of soil conservation, for fertile soils soon produce a protective cover of vegetation which for the most part is the best preventive of soil erosion.

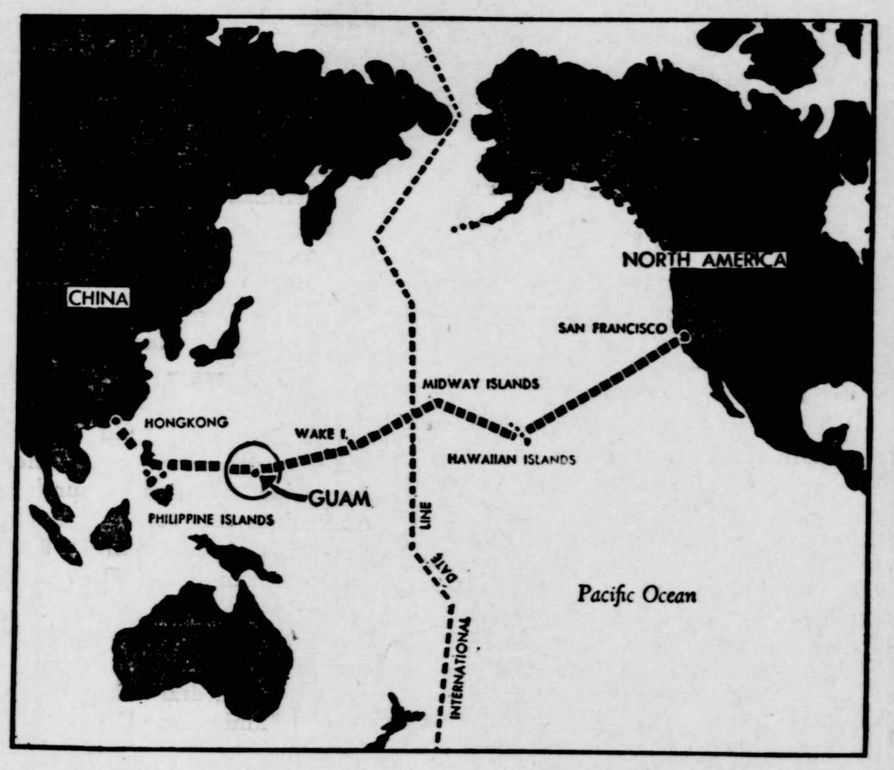
"Can farmers be sold on the philosophy of returning as much to the soil as is removed? This philosophy is so simple and so sound that farmers can be induced to accept it more easily than some of the make-shift or stop-gap philosophies.

"Will the cycle of soil depletion and agricultural desolation be repeated over and over, indefinitely? If the answer is to be no, then it will be necessary for the agronomist not only to take soil science from the sequestered cloister of the laboratory and hitch it to the plow, but also to go forth preaching a positive and realistic program of soil management and conservation as Edmund Ruffin did over 100 years ago.

* * *

"George Washington's agricultural career has its lessons for us, even though we should not do well to follow some of his methods. The lessons lie rather in his conception of farming as an honorable occupation capable of being put on a better and more scientific basis by the application of brains and intelligence; in his open-minded and progressive seeking after better ways."—Paul Leland Haworth in "George Washington, Country Gentleman."

Guam, Tiny Island in Pacific, Is Important U. S. Possession



ON DIRECT ROUTE. Here is a map showing the location of Guam, tiny American insular possession in the Pacific. The island lies on the route of the trans-Pacific air clippers flying between North America and Asia. Before the coming of these ships Guam had no direct mail service but now a letter can reach the United States in four days. Heavy dotted line indicates route of air clippers.

Air Clippers Bring New Life to Forgotten Spot.

Prepared by National Geographic Society, Washington, D. C.—WNU Service.

Green, warm, and inviting, Guam lies in the path of the Pan American Clipper ships as once it lay on the direct route of the Spanish treasure galleons that plied between Manila and Acapulco. It is no longer an isolated and forgotten spot on the map, but an important link in a chain that encircles the globe. Before the coming of the air Clippers, Guam had no direct mail communication with the United States and by the time a letter arrived it was often more than a month old. Mail either came on irregular and infrequent naval transports requiring a full three weeks for the voyage, or else went by liner all the way to Manila, whence it was brought back to Guam on one of three transports visiting the island from the Asiatic side each month.

Today the trans-Pacific clippers, on a regular schedule of a plane a week in each direction, carry mail and passengers from Guam to Alameda, Calif., and vice versa, in four days.

There are just so many houses available for American occupancy in Guam, and it is necessary for the departing personnel to go aboard the same transport that brings replacements. The departing families leave their houses in operating order, with well-stocked refrigerators, and servants already installed. This makes moving day practically perfect.

Land of Sunshine.

Guam is a land of brilliant sunshine and deep shadows; happy children and forlorn, neglected dogs and cats; canned milk and cow-drawn vehicles. The natives pack the cinema houses to see western pictures, sing cowboy songs in praise of the great open spaces, and go home to sleep, ten or more in a room, with all the windows closed and locked to keep out evil spirits!

The Chamorro language, one of that great family of Malayan tongues, is the vernacular of the island. All instruction in the schools is carried on in English, by native teachers, but the moment school is out the youngsters begin to chatter in their preferred language, and forget all about English until school opens the following morning.

They call their language Finojaya, the "Idiom of the South," and refer to Spanish, which many understand and speak to some extent, as Fino-lago, or the "Idiom of the North," because the Spaniards first appeared here from the north.

While an increasingly large number of Chamorros now have a working knowledge of English, there remain many who speak only their native language. There are Spanish residents who speak only Spanish and Chamorro, Japanese who have acquired a knowledge of Chamorro, but little English. Thus amusing difficulties often arise, sometimes requiring a battery of interpreters.

Wedding Customs.

The lot of the Chamorro bridegroom is a hard one. More often than not all the wedding plans are made by the parents of the contracting parties. The house in which the couple is to live, its furnishings, even the bride's wedding gown and fandango dress and all the bridesmaids' costumes, are planned by the elders, but the bridegroom has to pay for them.

By no means the least expensive item is the fandango. Any young man of standing in the community is expected to provide a feast for a hundred or more of his friends.

Because Friday is the favorite morning for weddings, you are awakened early almost every Friday morning by the clatter of the cathedral bells, announcing that another knot has been tied, and that perhaps, for some time to come, another young lad will be trying to pay his fandango bills!

In Agana, the capital of Guam, where more than half of the island population lives, there are many native families of means, very often of wealth, according to the local scale. They are business men, government employees, and school-teachers. They read books and magazines, go to the movies, and in other ways keep more or less abreast of the times.

They are, for the most part, mestizos, with Spanish, German, Scottish, or American blood. The natives of this upper stratum of Guam society claim descent, on the Chamorro side, from the ancient chieftains. It is unlikely that there are any persons of unmixed Chamorro ancestry on the island, even in the back country, but of course the mixture of European blood is most noticeable in Agana, which has always been the capital city.

Many Are Educated.

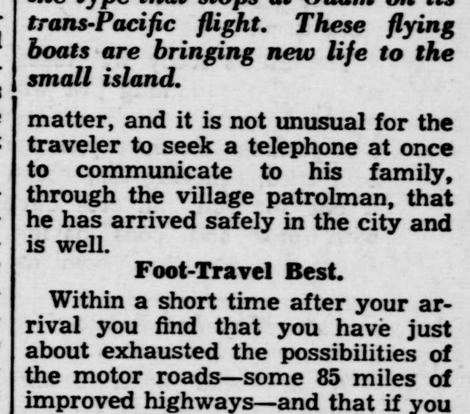
Many of the men and women of the upper class have had educational advantages that place them above their neighbors. Some have attended school in Manila, Hongkong, or the United States. The girls and women of this group are handsome, often beautiful, and are dressed in the latest fashion from Manila or San Francisco.

The most important official function of the year is the reception at Government House on New Year's day. Then daughters of the old families of Guam present a picture one does not forget.

There are very definite social divisions among the 20,670 native inhabitants of Guam. The town resident feels somewhat superior to the man from the back country, and villagers display a marked envy of dwellers in Agana.

Many Chamorros in some of the remote settlements have never traveled beyond the limits of their own village. They appear to have very little curiosity about the island on which they live, and are sometimes incredulous when you speak of interesting places you have visited which may be within a short distance of their homes, but which they have never seen.

A journey of 10 or 12 miles is looked upon as a formidable undertaking. Formerly it meant an allday journey in a bullcart, or perhaps on foot. Even now that there are automobiles, the trip from an outlying village to Agana, a ride of perhaps 40 minutes, is still a serious



BOEING CLIPPER. Picture shows a huge Boeing Clipper of the type that stops at Guam on its trans-Pacific flight. These flying boats are bringing new life to the small island.

matter, and it is not unusual for the traveler to seek a telephone at once to communicate to his family, through the village patrolman, that he has arrived safely in the city and is well.

Foot-Travel Best.

Within a short time after your arrival you find that you have just about exhausted the possibilities of the motor roads—some 85 miles of improved highways—and that if you are really going to see Guam you should have to see it on foot. The roads over which a motorcar can pass serve only the principal villages, and these are near the seashore. Only footpaths and carabao trails reach into the hills and the jungles, where no wheeled vehicle can travel.

Merchandise and farm products are packed in and out of the backs of the strong, patient carabao, or water buffalo, which, in the rainy season, sometimes sinks to its shoulders in mud.

You have no difficulty in finding guides to take you over the island, but you have to engage a different one for each district you want to visit. Each man knows only his own immediate surroundings. In many places the trails are not clearly defined; indeed, you often have to cut your way through the jungle with machetes. Since a mosquito-infested jungle would hardly be a comfortable place to get lost in, you invariably have a native as guide and carrier.

The Chamorros do not carry water on the inland trails. They drink from any stream or pond, even when it is obvious that carabaos or other animals have recently been there. Besides, in the jungle one can always get a drink that will at least prevent actual suffering from thirst by cutting a couple of feet of guiji vine, which grows everywhere. Sap literally gushes from the vine so cut, and it is not unpalatable.