

Mirando al Futuro

Los datos anteriores ilustran la amplitud y la precisión de las investigaciones de Finlay sobre la fiebre amarilla. Sus investigaciones y experimentos en otros campos fueron también muy valiosos, pero no pueden reseñarse aquí. Al señalar el camino hacia el triunfo sobre la fiebre amarilla, Finlay se señaló a sí mismo el camino de la inmortalidad. No sería extraño que en el futuro se le considere el mayor benefactor médico de este Hemisferio.

La historia de los trabajos largos y pacientes de Finlay son la inspiración de otros que ansían descubrir los secretos de la naturaleza. Su ejemplo les advierte que perseveren en su obra sin importarles las burlas o la indiferencia. Su triunfo es un mensaje que advierte a la ciencia que no se niegue a dar oídos a investigadores honestos, por desconocidos que sean. Sus escritos revelan que su mente estaba siempre dispuesta a recibir la verdad, no importa de dónde proviniera, así como a reconocer sus propios errores.

La humanidad padece aún enfermedades de carácter mortal que pudieran conquistar otros Finlay. Tengamos presente en su caso, para que otros investigadores que tal vez están descubriendo en estos momentos los misterios del cáncer, de la poliomielitis y de otras plagas, no sufran decepciones que fueron el corolario de la obra de Finlay.

Los jóvenes que sientan las inquietudes propias de los investigadores tendrán amplio campo de exploración en el Instituto Finlay de las Américas. Claro que es camino que exige ardua labor, tenacidad de propósito y serenidad de espíritu. Pero el objetivo es noble, y gloriosa la recompensa que reciben los descubridores: nada menos que el divino honor conferido a Abou Ben Adhem.

authority," so that instead of merely pledging the United States to join "in the maintenance of international authority" to preserve peace, the resolution will pledge us to join "in the establishment and maintenance of an international authority for that purpose. We can understand the position and the arguments of the Senators who have been sinking this light for the two-letter word. They think that "an international authority" is a much more definite phrase, carrying much stronger implications of American membership in a new league of nations, than the blank words "international authority." We agree with them. And yet, as a newspaper which consistently advocates American membership in the present League of Nations over the whole period of 20 years between the two World Wars, we doubt whether the point they have raised is important enough at this time to risk delaying action by the Senate.

For the question at issue now is not how to organize a post-war peace. The Senate itself is in no position to do this: the President must lead the way, and the question cannot become a real issue until he has consulted with the heads of the nations which will be our partners in such an effort and then presented to the Senate the plan on which agreement has been reached. The only real issue now is whether the Senate shall choose this moment to encourage the President to proceed with such negotiations.

We think that it should, and that the important thing is not the precise language in which it is done, but the broad purpose expressed in its resolution and the speed and good will and degree of unanimity with which this resolution is adopted. We would rather have a general resolution adopted by an overwhelming nine-tenths majority of the Senate at the end of a single week's debate than have a specific resolution approved by a narrow squeak at the end of a month's struggle. For strong approval of the main principle of international cooperation is what matters now, and we are not afraid that the Senate will backslide later unless it is committed to something definite. There will be no backsliding this time. The American people are going to demand adequate protection against the outbreak of another major war, and the American Senate is going to heed their demand. Of that we can be certain.

Carlos Finlay

EXTENSION OF REMARKS

HON. SOL BLOOM
of KSEW YORK

IN THE HOUSE OF REPRESENTATIVES
Thursday, October 28, 1943

Mr. Speaker, it is very appropriate that the name of Carlos Finlay should grace and identify an institution designed to promote research in medicine throughout all the Americas. His life was given to research and the practice of medicine, and to him, above all others, the Americas owe the blessing of protection against a scourge that formerly ravaged their cities and destroyed their peoples. But for Carlos Finlay, yellow fever might still be a blight upon one of the fairest regions of the New World. Through the efforts of the medical profession in the United States, in Cuba, and in the other American republics, and especially through the

New York, as Dr. Weir Mitchell suggested, he returned to Havana. He pursued medical studies in Peru and at Paris, practiced for a time at Matanzas, Cuba, and finally settled at Havana for his life work. In 1805 he married Miss Adèle Shine, an Irish

personal efforts of Dr. Benjamin Salter and Dr. Edgar Mayer, of New York City, the spotlight of public recognition is being focused on the memory of this great benefactor of mankind.

A study of the life and work of Carlos Finlay restores our pride and faith in humanity. It reveals a man whose sympathetic heart inspired an intellect of extraordinary range, penetration, and power. It throws light upon the career of a modest physician who, by his own acumen and industry, discovered one of the most subtle secrets of nature and applied his discoveries to the saving of millions of human lives. This study shows also how heedless mankind brushes aside its benefactors, little knowing that under the cloak of everyday drudgery lives an immortal whose achievements are to bless humanity for all time.

What was Carlos Finlay's crowning achievement? In a word, it was the discovery that yellow fever is transmitted from man to man by the bite of a mosquito that has previously sucked the blood of a yellow-fever victim; that the disease is contracted in no other way, and that a particular kind of mosquito is the vector or carrier of the disease.

Now that the world knows that yellow fever is transmitted by the bite of a certain kind of mosquito the fact seems to be simple enough, so simple that everybody should have known it from the first. But other discoveries seem simple, too: the discovery of the New World, for example, or the discovery of a method of human flight. We forget that Columbus was scorned and derided by the wisest men of his time for daring to assert that he could find a continent by sailing westward from Europe. The Wright brothers, even after they had devised a machine that actually carried them through the air, were regarded in Ohio as half crazy by their matter-of-fact neighbors; and the universal comment was, "Those boys will break their necks yet; you see, if they don't. They think they can learn to fly."

Ridicule and contemptuous scorn constituted the only public notice given to Carlos Finlay for nearly 20 years after he had the hardihood to disclose his theory of mosquito transmission of yellow fever. His idea ran counter to popular tradition and belief. Just as Columbus' theory contradicted the opinions of his day, and just as Morse evoked derisive laughter when he proposed to transmit intelligible messages by means of electric wires stretched from one town to another, Finlay's experience was the well-nigh universal experience of theorists who offer new ideas to mankind. To our chagrin we must admit that mankind even in our day is reluctant to accept newly discovered truths.

Happy is the discoverer who lives to see his theory proved true, and thrice happy he who reaps the credit for his discovery. Poor Columbus died at Valladolid in obscurity and discredit, and the name of another explorer was given to the New World which Columbus found. The man whose discovery banished the curse of yellow fever from the New World, whose genius enabled the United States to build the Panama

girl, whose father, a native of Cork, had settled at Port of Spain, Trinidad, where she was born. She was educated in a convent at Cork. After the death of her father and mother she lived with a sister, wife of James Murphy, a businessman whose

Canal after the French had fallen victims to the yellow pest—this man lived to see his theory confirmed, but not long enough to reap full credit from mankind. Even now, after a lapse of 40 years, it is not generally known in the United States that Carlos Finlay was the true conqueror of yellow fever. The lion's share of the credit has gone to others; not because they willed it so, but largely because their spectacular verification of the validity of Finlay's theory, followed closely by the eradication of yellow fever at Havana and Panama, attracted more attention from Americans than the phenomenon of Finlay's detection of a secret of Nature. Another factor which prevented the diffusion of Finlay's fame in this country was that his writings were published chiefly in the Spanish language, which made them literally a closed book to Americans generally.

The Institute that now comes into being will aid in extending the fame of Finlay, which already shines so brightly in Cuba and throughout Latin America. And as Finlay's renown spreads, the fame of Walter Reed will be enhanced, as will that of all the others who shared in the honor of confirming Finlay's theory and putting it into practice.

CARLOS FINLAY THE MAN

Before sketching the course of Finlay's labors in developing and proving his theory, let us glance at the life story of the man himself. He was born at Puerto Principe—now Camaguey—in Cuba, on December 3, 1833. His father Edward was a Scotsman, born at Hull, England, in 1795 and educated at Edinburgh and in France. While still a medical student, Edward sailed with a brother for South America to join a British contingent fighting under Bolívar for the independence of Venezuela. They were shipwrecked and Edward found himself at Port of Spain, Trinidad, in 1826. He was admitted to practice there, and married Eliza de Barrés, a girl of French descent. They removed to Cuba in 1831, settling at Puerto Principe, where Carlos Finlay, the subject of this sketch, was born. The family moved to Havana in 1834, and the father practiced medicine there until his death in 1872.

Carlos Finlay was a student from childhood. He learned to speak English, French, and German, as well as Spanish, in his boyhood. In 1846 and again in 1848 he studied in Germany and France, intending to qualify in medicine at Bonn and Paris but an attack of typhoid in 1851 caused him to return home to Havana for convalescence. He was now well versed in languages, the classics, history, literature, and physics. Still inclined to follow his father in the practice of medicine, Carlos went to Philadelphia and began his studies at the Jefferson Medical College under the instruction of John Kearsley Mitchell. Dr. Mitchell's son, afterward famous as Dr. Weir Mitchell, was at that time assisting his father, and a strong friendship sprang up between him and young Finlay of Cuba. This friendship was of lifelong duration.

Finlay was graduated as a doctor in medicine in 1835. Instead of setting in

Interests in the West Indies led to the permanent residence of the family in Havana. Three children were born to Carlos and Adele Finlay, the eldest being Carlos E., who was educated in New York City as a physician. He followed

In the footsteps of his grandfather and father as a medical practitioner in Habana. This son, urged by admirers of his father, wrote the book, *Carlos Finlay and Yellow Fever*, which was issued by the Oxford University Press, New York.

In 1940. It is a charming volume. In which a distinguished son sets forth with dignity and modest pride the story of Carlos Finlay and the facts concerning yellow fever and its conquest.

Although Carlos Finlay presented his mosquito transmission theory to the world in 1881, it was not until 1900-1805 that skeptics were silenced by indisputable confirmation of the theory and by eradication of yellow fever from Habana, where it had taken toll of human life without intermission for 140 years.

Dr. Finlay continued his researches and labors in this field. In 1902 he became head of the Department of Public Health of Cuba, and held that post until 1909. He lived in retirement thereafter until his death on August 20, 1915, at the age of 62. The Cuban Government paid tribute to its famous citizen by directing the funeral honors with which he was laid away.

Finlay's name is perpetuated by the Finlay Institute of Cuba, dedicated principally to the study of tropical medicine; by the Finlay Order of Merit, established in 1928 by the Cuban Government to reward exceptional work in the field of public health; by honors from governments and scientific societies in both hemispheres; and by the writings of historians dealing with medical subject in connection with the discovery and settlement of the New World.

THE STORY OF YELLOW FEVER

From a period long prior to the time of Columbus down to the present day the mystery surrounding the nature of yellow fever has continued. Its ravages in Yucatan were recorded by the Mayas before the white man was known. It periodically depopulated the region around Veracruz, Mexico, and the Aztec monarchs sent in fresh colonies to replace those who had succumbed. The disease was known to the Aztecs as *cocoliztli*. After 1493 one expedition after another of white men was stricken with a disease which, because of the high percentage of fatal cases, is believed to have been yellow fever. The epidemic of 1648 in Yucatan was terrible in its sweep. Successive epidemics devastated the whole settlements in the Spanish Main.

Yellow fever became endemic in Habana in 1762, and thereafter that city was never free from it until Finlay's discovery led to its extermination.

Although there is reason to believe that the population of the Mediterranean region was held down for centuries by visitations of yellow fever, predominant scientific opinion classes yellow fever as a disease originating in tropical America. Years of test by the best qualified students have failed to isolate the parasite, bacillus, or micrococcus which causes yellow fever.

In his early research, Carlos Finlay studied the climate of Habana, on the tentative theory that the alkalinity of the atmosphere might have much to do with the presence or spread of yellow fever. He labored long in this direction, only to find that his experiments were fruitless.

Research went on in many places, year after year, and Finlay kept abreast of all work done. In 1879 a yellow fever commission, of which Dr. Stanford E. Challis was chairman, was sent from the United States to Habana. Finlay was attached to this commission by appointment of his government. The researches of this commission developed information which caused Finlay to abandon his first hypothesis and take up a new line of study. This resulted in his discovery of the part played by the mosquito in the transmission of yellow fever.

The idea of a mosquito as a vector of the disease was novel and revolutionary. No one had ever suggested that any disease could be transmitted from man to man through an intermediate agency. Still less was it supposed that yellow fever was communicable only by the agency of a mosquito. Finlay first made public his theory at a session of the International Sanitary Conference in Washington on February 13, 1911. Two other delegates had proposed that the conference provide for a scientific investigation of yellow fever, and Finlay supported the proposal. The writing of portions of his remarks were as follows:

"I declare it urgent that the Commission should adopt a resolution favorable to the scientific investigation of yellow fever. . . . without entering into technical considerations, which would be out of place, and, at the same time, an example which would render, so to speak, palpable the interest of such an investigation. . . . I beg to remind my colleagues here present that the sanitary measures now generally recommended against yellow fever are founded upon a mode of preventing the disease which is completely in variance with a considerable number of observed facts. We have on one hand the contagionists and on the other the noncontagionists, each endeavoring to deny the importance of the cases brought forward by the contrary parties. . . . Well, gentlemen, I declare that it is impossible for an impartial mind to look into the stated facts without arriving at a conclusion that many of the proofs cited in favor of each of these apparently contradictory opinions must be accepted as perfectly authenticated facts, which conclusion necessarily leads to the other consequence, that we must admit the intervention of a third independent condition in order to account for the two orders of facts."

It is my present opinion that three conditions are necessary in order that the propagation of yellow fever shall take place:

- 1 The presence of a previous case of yellow fever within limits of time counting from the moment we are now considering.
- 2 The presence of a person apt to contract the disease.
- 3 The presence of an agent entirely independent for its existence both of the disease and of the sick man, but which is necessary in order that the disease shall be

conveyed from the yellow fever patient to a healthy individual.

It will be objected that this is a mere hypothesis, and indeed, it is only as such that I give it. But I believe that it is a plausible one, which has at least the merit of explaining a certain number of facts which have hitherto remained unaccounted for by the current theories. I do not ask for anything else, and my only object is to show that if my hypothesis, or some other analogous to it, should be realized, all the measures which are now employed to check the progress of the disease would turn out to be without effect. Inasmuch as the principal effort should have been directed against the third condition by endeavoring to destroy the agent of transmission or to divert it from the path that it follows in communicating the disease. You see, therefore, gentlemen, how important it is that this question should be thoroughly studied. I do not wish to be led upon a false track while recommending particular measures against the propagation of the disease.

Six months later, on August 14, 1881, Dr. Finlay read a paper before the Royal Academy of Sciences of Habana in which he developed his theory that yellow fever is communicated from man to man only by the agency of a mosquito. Not only did he make this daring statement, but he went further and identified a particular kind of mosquito, called by him *Culex*, and generally known later as *Stegomyia fasciata*, as the only one that conveyed the poison. He had reached this conclusion after months of experiment and patient observation. The novel facts he had learned regarding the habits of the *Stegomyia* were fully confirmed by later naturalists. In this historic paper Dr. Finlay said:

"In this paper I shall not concern myself with the nature or form of the morbid cause of yellow fever, beyond pointing out the existence of a material transportable substance, which may be an amorphous virus, a vegetable or animal germ, a bacterium, etc., but it is any rate constitutes something tangible which requires to be conveyed from the sick to the healthy before the disease can be propagated. What I propose to consider is the means by which the morbid cause of yellow fever is able to part from the body of the patient and to be implanted upon that of a healthy person. The need of an external intervention apart from the disease itself in order that the latter may be transmitted is made apparent by numerous conditions, some of them fully pointed out by Humboldt and Benjamin Rush since the beginning of this century, and now corroborated by recent observations. Yellow fever at times will travel across the ocean to be propagated in distant ports presenting climatic and topographic conditions very different from those of the focus from which the infection has proceeded. While at other times the disease seems unable to transmit itself outside of a very limited cone, although the meteorology and topography beyond that cone do not appear to differ very materially. Once the need of an agent of transmission is admitted as the only means of accounting for these anomalies, it is evident that all

Of the conditions which have heretofore been recognized as essential for the transmission of the disease must be understood to act through their influence upon the said agent. It seems unlikely, therefore, that this agent be found among the microphytes, for those lowest orders if animal life are but little affected by such meteorologic variations as are known to influence the development of yellow fever. To satisfy that requisite it was necessary to search for it among insects. On the other hand, the fact of yellow fever being characterized both clinically and (according to recent findings) histologically by lesions of the blood vessels and by alterations of the physical and chemical conditions of the blood suggested that the insect which should convey the infectious particles from the patient to the healthy should be looked for among those which drive their sting into blood vessels in order to suck human blood, finally, by reasons of other considerations which need not be stated here, I came to think that the mosquito might be the transmitter of yellow fever.

He then detailed the natural history of the different varieties of mosquitoes found at Habana and set forth the reasons why he fastened upon the *Culex fatigans* as the only mosquito that transmitted yellow fever.

Then followed 19 years of study on Finlay's part, and with almost no encouragement from scientific men. His theory was almost universally derided as visionary. Sir Patrick Manson had discovered the indirect transmission of filaria by the mosquito, a fact which he published soon after Finlay had found that the mosquito was the only vector of yellow fever, but this additional evidence that disease is communicate by insects did not seem to impress either scientific men or laymen.

Instead of taking up research along the lines pioneered by Finlay, American research for the most part was concentrated upon efforts to find the specific bacillus or virus of yellow fever.

Finlay's further experiments confirmed his theory of mosquito transmission of yellow fever. He cautiously inoculated nonimmune individuals by means of infected mosquitoes and developed mild cases of yellow fever, but his studies had warned him that fatal results would follow under certain conditions, and he refrained from risking the lives of persons who submitted to his tests. Hence it was claimed that his experiments were negative in character.

GENERAL GORGAS' TESTIMONY

Then came the Spanish-American War and the occupation of Habana by the Americans. What followed is well told by Gen. William C. Gorgas in his book, *Sanitation in Panama*, which was published in 1915. He was in charge of the sanitary department of Habana after the occupation. He tells how a commission had been sent to Habana in 1899 by the Public Health Service of the United States to study yellow fever; how it reported that the micro-organism discovered in Brazil by Professor Sanarelli, of Italy, and by him called bacillus icteroides, was the cause of yellow fever; how Sen. George M. Sternberg, of the United States Army, doubted this finding and brought about the appointment of a board of Army medical officers to investigate yellow fever at Habana; and how this board, composed of Drs. Walter Reed, James Carroll, Jesse Lazear, and Aristides Agramonte, began its work. The board spent several months in investigating Sanarelli's organism, and proved beyond doubt that it was not the cause of yellow fever.

It was then believed that yellow fever was a filth disease. But a thorough cleaning of Habana under the direction of Major Gorgas failed to reduce yellow-fever cases.

In spite of all this work and care—Writes General Gorgas—yellow fever had been steadily growing worse ever since we had taken possession of the city, and in 1900 there were a greater number of cases than there had been for several years. The Cubans twitted us with the fact

that all our cleaning up and expenditure net only had not bettered things, but had even made them worse. They called attention to the fact that the very cleanest and best kept portions of the city were by far the worst sufferers from yellow fever, and the evidence was so stalingly before our eyes that we had to acknowledge the truth of what they said.

This frank confession by General Gorgas is of special interest when compared with a statement made in 1881 by Carlos Finlay in the memorable paper announcing his mosquito transmission theory.

I feel convinced that any theory which attributes its origin and propagation of yellow fever to atmospheric influences, miasmatic or malarial conditions, or filth or to the neglect of general hygienic precautions, must be considered as utterly indefensible. I have, therefore, been obliged to abandon my former ideas, and shall now endeavor to justify this change in my opinions. Had American scientists listened to Carlos Finlay from 1881 onward, they could have saved thousands of lives and millions of dollars lost through yellow fever in the southern portions of the United States. But they persisted in the notion that filthy conditions propagated yellow fever, and that superior American sanitation would eradicate the disease at Habana.

The health authorities were at their wits' end—Writes Gorgas.

We evidently could not get rid of Habana as a focus of infection by any method we then knew. He refers to the commission of medical men appointed by the Sanitary Department of Habana, to whom all cases of yellow fever were referred for diagnosis. Gorgas was a member of the commission, and the other members were Dr. Carlos Finlay, Dr. Antonio Alberlini, and Dr. John Guleras. The Reed board was in touch, naturally, with this commission.

WORK OF THE REED BOARD
Gorgas then tells how the Reed board after wasting months in futile experiments along other lines, turned to Dr. Finlay for advice and information.

Dr. Carlos Finlay, of Habana the physician just mentioned as being a member of our Commission, had ever since the year 1831 been investigating thinking of and writing about the relation of the mosquito to yellow fever. He had convinced himself that this insect was the means whereby the disease was conveyed from person to person. His argument from the then known facts with regard to yellow fever, showing from these facts that it was probably the mosquito that conveyed this disease, was most beautiful and logical. Out a still more beautiful piece of reasoning was the induction that it was the *Stegomyia* mosquito, out of the all or seven hundred species of mosquitoes, that conveyed yellow fever.

After contending that Finlay had never conclusively demonstrated the validity of his mosquito theory, and ignoring Finlay's own statement that he had refrained from experiments with infected mosquitoes under conditions which probably would have been fatal to the inoculated individual, Gorgas proceeds:

Reed says of Finlay: "To Dr. Carlos Finlay, of Habana, must be given, however, full credit for the theory of the propagation of yellow fever by means of the mosquito, which he proposed in a paper read before the Royal Academy in that city at its session on the 14th day of August 1881."

The Reed board, after many months of inconclusive work in other directions, turned their attention to Dr. Finlay's theory. Dr. Reed discussed the matter with Dr. Finlay.

A good deal before he commenced his mosquito work, and was thoroughly familiar with Dr. Finlay's arguments and ideas on the subject. Indeed, we all knew Dr. Finlay well, but were rather inclined to make light of his ideas, and none more so than I.

Dr. Reed got from Dr. Finlay the eggs from which he raised the mosquitoes used in his experimental work. Dr. Reed says in his paper, "The Etiology of Yellow Fever. Preliminary Note: 'We here desire to express our sincere thanks to Dr. Finlay, who ac-

corded to us a most courteous interview and has gladly placed at our disposal his several publications relating to yellow fever during the past 10 years, and also for one of the species of mosquito with which he had made his several inoculations."

After consultation the Reed board determined to experiment to see whether the mosquito really did convey yellow fever. But it was necessary to have a good deal of money and sufficient authority before starting. The board had come to Cuba for entirely different investigations, and had not been supplied with sufficient funds for these experiments. Fortunately for the cause of science and of humanity, we had as Governor General of Cuba at that time Gen. Leonard Wood, of the United States Army. General Wood had been educated as a physician.

Dr. Reed outlined to General Wood the course that he expected to pursue, and General Wood was so convinced by Dr. Reed's argument that he authorized the expenditure from Cuban funds of a sufficient sum and gave Dr. Reed ample powers as to the method of expenditure.

Dr. Reed wished to make his demonstrations as convincing and spectacular as possible. It was on entirely new idea, and his conclusions excited a great deal of adverse comment and criticism. This theory was so contrary to what most men thought had been their practical experience that it was received with scant consideration. The conclusions announced by the board were as follows: "That yellow fever is conveyed from man to man only by the bite of the female *Stegomyia* mosquito."

These discoveries have been of enormous benefit to mankind, and upon them has been based the sanitary work against yellow fever which has been so successful.

FINLAY'S PLAN OF ERADICATION

After Finlay had satisfied himself that the mosquito was responsible for yellow fever he gave thought to practical plans for eradicating the disease by breaking the chain of infection. Year before Gorgas began his sanitation of Habana, Finlay had pointed the way. He outlined his ideas at Chicago in 1893 and at Budapest in 1894, when he addressed the International Congress of Hygiene. On the latter occasion he said:

The special measures which might be adopted against the propagation of yellow fever through mosquitoes must be left to the criterion of those who accept my theory, but the principal precautions must be: 1. To prevent these insects from stinging yellow-fever patients; 2. To destroy as far as possible the mosquitoes that have been infected, bearing in mind that in close spaces a temperature of 60° C is sufficient for that purpose; 3. Finally, to consider any place unsafe so long as the mosquitoes which have stung yellow-fever patients may be alive in it. 85 to 140 days' being the term of their existence under the most favorable condition.

In 1898, after the United States occupied Cuba, Dr. Finlay offered to American Army and Navy officers his detailed plan for stamping out yellow fever, in which he said:

Why should not the houses, in yellow-fever countries, be provided with mosquito blinds? such as are used in the United States are a matter of comfort, while here it may be a question of life or death. The mosquito larvae might be destroyed in swamps, pools, privies, sinks, "treat-sewers" and other stagnant water. In which they are bred by a methodical use of potassium permanganate, or other such substance. In order to lessen the abundance of mosquitoes. But the most essential point must be to prevent the inoculation from reaching yellow fever patients and to secure the proper disinfection of all "upplac" discharges. In order to forestall the contamination of those insects. Well-ventilated hospitals should be built upon high ground with no stagnant waters or marshes near their vicinity; doors and windows protected by mosquito blinds; a good system of drainage and sewerage; and facilities for destroying any mosquitoes or larvae which might be found within the building; only the upper stories should be occupied by the sick and none but yellow fever patients and such malaria patients as are considered immune against yellow fever should be admitted. The examination for admission might be carried out in a separate building and in a separate department devoted to the suspicious cases under observation.

With such hospitals in hand, and an efficient board of health, which would be the proper arrangement of

APPENDIX TO THE CONGRESSIONAL RECORD

Af">7

patient" who could be left at their homes, and general sanitary improvement" within and around the principal cities, there could be no doubt that yellow fever might be stamped out from Cuba and Puerto Rico and malaria reduced to a minimum. It would then be the business of the port and quarantine officer" to prevent the introduction of fresh germs.

LOOKING FORWARD

The foregoing data illustrate the breadth and precision of Finlay's studies in regard to yellow fever. His researches and experiments in other fields were of great value also, but they cannot be detailed here. By pointing the way to eradication of yellow fever Finlay earned perpetual renown, and it may well be that he will be regarded as the greatest medical benefactor of this hemisphere.

The story of Finlay's long and patient toil is an inspiration to others who are eager to discover the secrets of nature. His example tells them to stick to their task in spite of neglect and ridicule. His triumph is a message to science, warning it not to close its mind to the claims of reputable investigators, however obscure they may be. His writings reveal that his mind was always hospitable to truth, wherever it appeared, and prompt to acknowledge error in his own inferences.

We are still confronted with diseases of deadly character which might be eradicated if another Finlay should appear. Let us bear in mind his career. In order that investigators who may even now be unlocking the secrets of cancer, infantile paralysis, and other scourges may not suffer the discouragements that attended Finlay's work.

The field that opens before the Finlay Institute of the Americas is one that invites exploration by devoted young men. It calls for arduous labor, tenacity of purpose, and serenity of soul. The goals are noble, and the rewards bestowed upon the discoverers are glorious, being nothing less than the divine honor that was accorded to Abou Ben Adhem.

Radio Address" in Connection With Third War Loan Drive

EXTENSION OF REMARKS

HON. JAMES H. FAY
OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES
Thursday, October 28, 1943 * Mr. FAY. Mr. Speaker, under leave to extend my remarks in the Record, I wish to insert a radio address made by me in New York City on October 4, 1943, over radio station WWRL in connection with the Third War Loan drive.

Victory on parade is truly significant today, for our troops are marching forward in victory on every front on which they are engaging the enemy, and our folk at home have just gone over, the top for a smashing victory in our Third War Loan drive.

The going may be hard for our troops because the enemies' forces are seasoned veterans of war and have been preparing for over a quarter of a century to bring devastation and grief upon a peace-loving world. But in the hearts of our fighters flows the blood of freemen ready and willing to lay down their lives if need be for the preservation of the liberties which our forebears have handed down to us.

What one among us can think his duty to his country in this saddest hour of our history? What one among us can live even with himself if he is not contributing in some measure to this victory which surely some day and I hope and pray it is soon.

Will he be ours? Whether he thinks about it or not, when these brave heroes of ours come home they will ask their neighbors: "What have you done on the home front while I was away fighting on the battle front?" The man who cannot answer it stands forever marked as a moral slacker who was willing to cheer but unwilling to sacrifice.

It is not too late. Right now the least service could be rendered is to buy War bonds and by so doing the individual helps himself as well as his country. Your money will make the implementation of war which our Senators who have toured our fighting front a fact and orally needed by Gen. Douglas.

MacArthur, my old commander in the Rainbow Division.

During the past summer I spent many weeks as a patient in the Halloran Oriental Hospital on Staten Island for an aggravation of a wax injury I got up with in the Argonne Forest while serving with the Fighting Sixty-ninth of New York. This is a 4,000-bed hospital equipped to take care of our wounded and sick soldiers. It cannot be surpassed in all the world, and I say it advisedly for I served for 10 years as an administrator of the great chain of municipal hospitals in our own city. As a matter of fact, Dr. William Jacoby, superintendent of Bellevue Hospital, visited me while there and after a tour of inspection with Col. Ralph DeVoe, the commanding officer, was warm in his praise of the modern up-to-date hospital methods employed.

Here I met men wounded at Guadalcanal, Tunisia,

and other fronts in Africa. It seemed no different than in the day of 25 years ago when I was recuperating in an Army hospital. The attitude and light, heartiness of the men was just the same. They made light of their sacrifice and were very warm in the praise of their treatment. They told of their different engagements in which they served and extolled their officers who led them. There is never a dull moment at Halloran, for public-spirited citizens provide entertainment and relaxation and I know that this condition prevails in every Army and Navy hospital in our country.

There is one thing that concerns the men and that is: "What is to become of them after the last shot has been fired and victory is ours?"

They know what the veterans of the First World War went through when they came home, and they don't want that to happen to them.

They don't want a bonus march on Washington. They don't want to sell apples on every street corner of every large city throughout our land. They don't want the medals they fought and bled for to be adorning the window of the book shops instead of their breasts which they bared so bravely to the enemy.

Are they don't want unemployment.

They want jobs. They want security. They want to settle down and enjoy the home life of their family and friends.

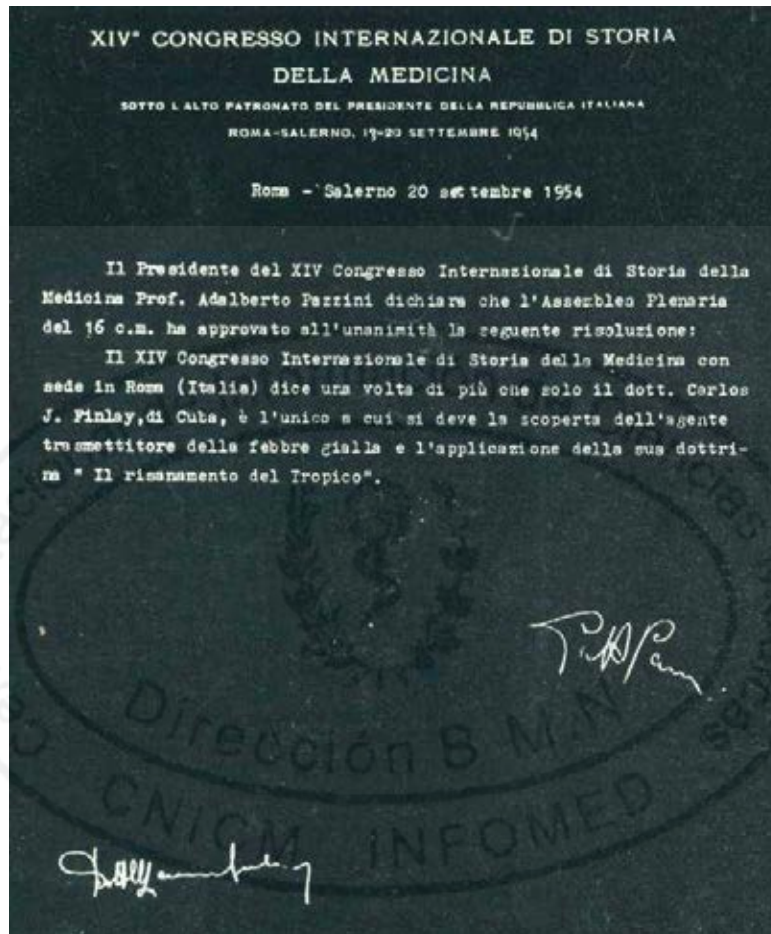
This Congress has before it many plans and suggestions for the rehabilitation of the serviceman. All plans are worthy of serious consideration. Last March Congress passed bills which were immediately signed by the President granting benefits to the men of World War No. 2 as are in operation today for the veterans of World War No. 1.

In my opinion the situation is vastly different today in veteran affairs as it is in the affairs of every situation in the light of these more modern times. The veterans' organization such as the Disabled American Veterans, the American Legion, the Veterans of Foreign War, and other veterans' associations have the answer before anyone, for they have lived with it for the past quarter of a century.

The major problem, as I see it, is to have jobs ready for the serviceman when he lays aside his uniform to return to civilian life.

There must be no let-down of 8 months before he finds gainful employment. The leaders of industry who converted peacetime industry into war machinery must be kept on the job to convert war machinery back into peacetime machinery.

Education after World War No. 1 was made available only to the few who wished to take advantage. It is so today the completion of high school or college law school. However, today we should be made possible for all veterans of this war who want to complete their education, their fathers' and mothers had planned for them before.



Fascimil del acuerdo adoptado por el XIV Congreso Internacional de Historia de la Medicina celebrado en Roma-Salerno (Italia) en 1954, reconociendo la obra y la gloria de Finlay.

XIV Congreso Internacional de Historia de la Medicina

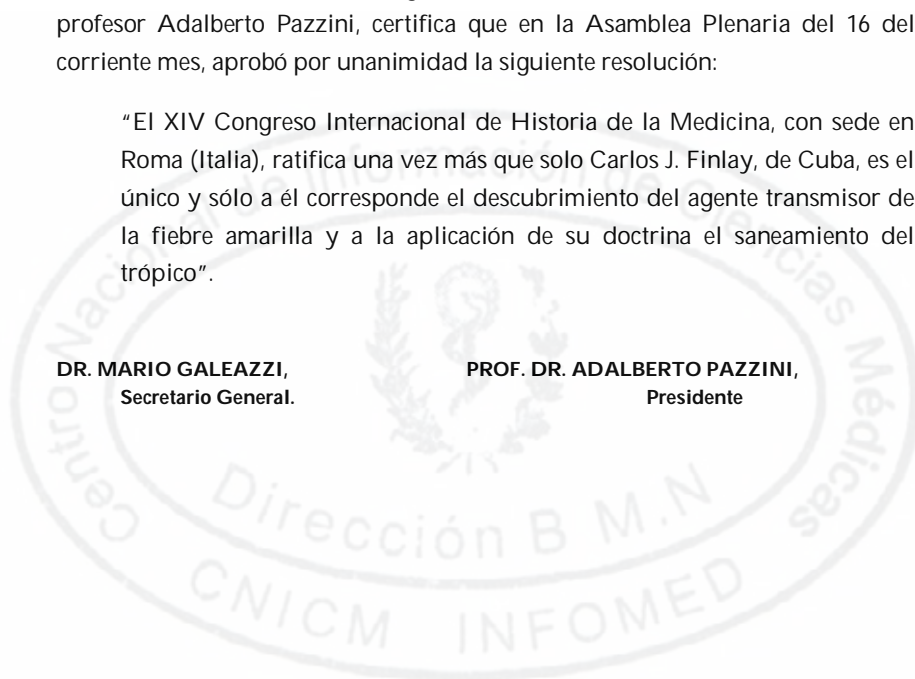
Roma-Salerno, 20 de septiembre de 1954.

El Presidente del XIV Congreso Internacional de Historia de la Medicina, profesor Adalberto Pazzini, certifica que en la Asamblea Plenaria del 16 del corriente mes, aprobó por unanimidad la siguiente resolución:

“El XIV Congreso Internacional de Historia de la Medicina, con sede en Roma (Italia), ratifica una vez más que solo Carlos J. Finlay, de Cuba, es el único y sólo a él corresponde el descubrimiento del agente transmisor de la fiebre amarilla y a la aplicación de su doctrina el saneamiento del trópico”.

DR. MARIO GALEAZZI,
Secretario General.

PROF. DR. ADALBERTO PAZZINI,
Presidente





XV CONGRESO INTERNACIONAL
DE
HISTORIA DE LA MEDICINA

MADRID-ALCALÁ 22-29 SEPTIEMBRE 1956

El XV CONGRESO INTERNACIONAL DE HISTORIA DE LA MEDICINA, con sede en Madrid-Alcalá de Henares (España), bajo la presidencia del Profesor Pedro Lain Entralgo y actuando de Secretario el que suscribe, adoptó - por unanimidad, en sesión plenaria celebrada en esta fecha, el siguiente acuerdo:

PRIMERO:- Confirmar la resolución aprobada por unanimidad en la sesión plenaria del XIV Congreso Internacional de Historia de la Medicina celebrado en Roma-Salerno (Italia) en septiembre de 1954, por la cual se ratifica una vez mas que sólo a Carlos J. Finlay, de Cuba, y sólo a él, corresponde el descubrimiento del agente transmisor de la fiebre amarilla y a la aplicación de su doctrina el saneamiento del trópico*.-

SEGUNDO:- Que la SOCIEDAD INTERNACIONAL DE HISTORIA DE LA MEDICINA, realice una campaña intensa a fin de que los libros de texto, diccionarios, enciclopedias y medios de divulgación no atribuyan a otras personas la gloria que por derecho propio pertenece a Finlay.-

Madrid 29 de septiembre de 1956.

Vto Bno
EL PRESIDENTE

P. Lain
Dr. Pedro Lain Entralgo.



XV CONGRESO INTERNACIONAL
HISTORIA DE LA MEDICINA
MADRID-1956-SALERNO

EL SECRETARIO

S. Pálafox
Dr. Silverio Pálafox.

Fascimil del Certificado Oficial del acuerdo del XV Congreso internacional de Historia de la Medicina, celebrado en Madrid-Alcalá de Henares en 1956, reiterando el reconocimiento a la obra y la gloria de Finlay.