

## **Hostilities against Malaria: The Rockefeller Foundation in Bulgaria.**

By Pierangelo Castagneto

Professor, Department of History  
American university in Bulgaria

[pcastagneto@aubg.bg](mailto:pcastagneto@aubg.bg)

© 2012 by Pierangelo Castagneto

The disastrous defeats suffered in the Second Balkan War (June 29, 1913-August 10, 1913), and especially, in the First World War, left Bulgaria with a series of unresolved social, political, and economic issues. In the aftermath of WW I and following, the abdication of King Ferdinand I in favor of his son Boris III, the failed process of national unification, combined with the harsh requirements established by the Neuilly-sur-Seine peace treaty, in November 1919, produced a traumatic impact on a country that was experiencing a crucial soul-searching moment in its history. Amid growing social discontent, the political election held in 1919 sanctioned the triumph of the parties that had firmly opposed Bulgaria's entry into WW I on the Central Powers side: the Bulgarian Agrarian National Union (BANU) and the Bulgarian Communist Party.

By March 1920, the Agrarian Party and its undisputed and controversial leader Alexander Stamboliiski, who was elected prime minister, ruled the country with an absolute majority of deputies.

In order to establish a new agrarian society, Stamboliiski's program aimed to divide up large landed estates and create a new class of peasants proprietors; a society "dominated by tidy, modernized villages with paved streets, clean waters, proper sanitation, good schools, adequate libraries, and cinemas."<sup>1</sup>

Despite attaining some remarkable achievements, the establishing of a nearly utopian agrarian society was hindered in many ways: the payment of relevant war reparations, both in

kind and in good; the slowness of the process of land redistribution; a growing level of corruption within the BANU rank and file; and finally, the solid opposition from all other Bulgarian political and social forces—the throne, the church, and the army included—all were factors which weakened Stamboliiski's radical process of reforming the Bulgarian society. However, after BANU's controversial electoral triumph in April 1923, it was a conspiracy organized by the members of the Internal Macedonian Revolutionary Organization (IMRO) that put a dramatic end to the Stamboliiski's experience.

Macedonian extremists were particularly enraged by the Treaty of Nish signed by Stamboliiski with Yugoslavia in March 1923 that had started off as an agreement of cooperation between the two countries in order to prevent IMRO terrorist raids from the southwestern Bulgarian region of Petrich into Greece and Yugoslav Macedonia. With the tacit assent of the king, the support of the army, the approval of a large political coalition, and with the Communist party refusing to take any initiative, the government was overthrown, and Stamboliiski brutally assassinated. Alexander Tsankov, a professor of political economy at Sofia University, became the new prime minister, leading a motley coalition, the Democratic Alliance.

This was the turbulent political scenario that Dr. Selskar M. Gunn, director of the Paris Office of the International Health Board (IHB) of the Rockefeller Foundation (RF), found when he arrived in Bulgaria, on February 26, 1923. In a letter addressed to Frederick F. Russell, the new general director of the IHB, Gunn explained the reason for his trip to the Balkan country, and how the IHB came in contact with the Bulgarian authorities. In November 1921, Gunn had met Professor Beron, a Bulgarian doctor, in Prague who “wished to know whether or not it would be possible for the International Health Board to assist Bulgaria. I informed him that it would be advisable for the Government to make an official request.”<sup>2</sup>

Such a request was forwarded by Dr. Georgieff, Director of the National Public Health Service, on April 12, 1922. At this point, Gunn was authorized by Wickliffe Rose, then general director of the IHB, “to go to Bulgaria any time within the next twelve months.” Meanwhile, in December, another request was sent to the RF through the American Minister in Sofia by Prime Minister Stamboliiski. Gunn’s presence in Bulgaria lasted about three weeks, from February 26 to March 16. Upon his return to Paris, he sent a detailed report to New York describing not only the sanitary situation of the country, but also giving an overview of Bulgarian society at large.<sup>3</sup>

According to Gunn, Bulgaria was “one of the few countries defeated in the war, which thoroughly realizes its defeat.” Drawn into an unpopular war by Czar Ferdinand and his ministers, “the country finds itself deprived of considerable territory, including Thrace and its port on the Aegean Sea, saddled with an enormous reparation amounting to two and a quarter billion of French gold francs, with no friends in the world, and one cannot be surprised that one encounters frequently more or less blank despair.” From a demographic perspective, the war left another heavy burden. According to the 1921 census, the population of Bulgaria was about five million, but since then, a large number of refugees arrived in the country. “It is estimated, Gunn writes, “that 500,000 Bulgarian refugees have been driven out of Thrace by the Greeks. In addition there are over 50,000 Russian refugees, and large numbers of Armenians and others who have come from Asia Minor.”<sup>4</sup>

Gunn’s opinion of Stamboliiski’s political conduct was particularly cautious, although he was “generally credited with having saved the country from bolshevism in 1919.” His authoritarian conduct may have found justification, if not approval, in the demand coming from the Bulgarian people, the peasants especially, for “retribution on the heads of those who, in their lights, had rendered an almost irreparable wrong to the country,” by involving it in the Second Balkan War and in the Great War. The intricate Macedonian question did not

fail to attract Gunn's attention; noting that "Stambuliiski's life has been in danger from Macedonians," he rightly anticipated the imminent tragic end of the agrarian leader.

The idea of a future Slavic Confederation, strongly supported by Stambuliiski, which would include Bulgaria, Macedonia, Serbia, Croatia, Slovenia, and Montenegro, would bring in Gunn's opinion, and many advantages; but at the moment, such a solution, because it required "great statesmanship," was not viable.

If instability was the key word in Bulgarian political affairs,<sup>5</sup> then Gunn's analysis showed that the health conditions in the country, the general organization of the public health system, and its administration were problematic too. Although the Bulgarian Ministry of Interior and Public Health had recently multiplied its efforts, "it will be remarked that this organization of activities under the National Service is not modern." Most of the existing structures, such as the State Hygienic Institute or the State Bacteriological Institute in Sofia, required an updated plan of renovation. Besides, just because "the interest was swinging more and more to really preventive medicine" rather than "Hospitals and Pharmacies," there was a growing need of men who might have "the benefit of training in Public Health work."

The situation of the medical and sanitary personnel was rather worrisome. The large majority of the approximately eight hundred Bulgarian physicians, "all of whom received their education in foreign countries," worked in the major urban centers, and for this reason there were many areas without medical assistance. Bulgaria, "on account of its lack of medical men," was forced years to adopt the Russian system and "create a corps of medical assistants or feldschers." Considered as "a necessary evil," the feldschers, after a rudimentary training, provided basic health assistance in rural Bulgaria. "In the village he not only acts as a local health officer, but practices medicine within certain limits." Their number grew after the war—to approximately two thousand—but unfortunately the school dedicated to their education was closed, and since then the selection process had become "a farce."

Nevertheless, the “feldschers have a very much stronger position in the country than the doctor,” and they are also “stated to be active politically.”

In the second part of his report, Gunn gave a dramatic account of the situation concerning “the acute and chronic infectious diseases” affecting Bulgaria. In spite of many difficulties, the amount of work done by the Division of Infectious Diseases “is not inconsiderable today and it seems to be only a question of time and money before the service will be really organized in a first-class manner.”<sup>6</sup>

Under the direction of Doctor Golosmanoff, a system of collecting reports from local health officers in different areas of the country was organized so that a screening of all communicable diseases became possible.<sup>7</sup>

Measles, scarlet fever, influenza, mumps, typhoid fever, and whooping cough were among those most commonly reported. Malaria, according to Gunn and without a doubt, represented “one of the most serious public health problems of the country.” The Bulgarian government, Gunn noted, had activated some measures in order to contain the spread of the disease:

The situation was bad before the war, but the war caused a wider spread of malaria and also introduced, to a considerable extent, the tropical form of the disease, which was very rare prior to the war. The government passed a special law in 1919 looking towards the control of malaria through the National Public Health Service under the Chief of the Bureau of Infectious Diseases. There was a General Inspector for Malaria, as well as a Special Committee of Experts attached to the Ministry that aided in the development of an Anti-Malarial Campaign.

To complicate things, by malaria not being “a reportable disease,” the statistics therefore might represent only the cases treated in public institutions; nevertheless, these cases alone “show a morbidity rate of 11.7 per thousand in 1921.” In some departments—Bulgaria was then divided into fifteen departments—with Varna, for example, this figure reached an impressive rate of 40.61 per thousand. A special study conducted in 1921 revealed that only a few districts were not hit by malaria. In large cities such as Bourgas, “between thirty and

forty percent of all persons who come to the municipal dispensaries for treatment come because they are suffering from malaria.”<sup>8</sup>

In order to face this critical situation, the Bulgarian government had already appointed six malaria inspectors dedicated full time to conduct surveys on the disease in the most at risk districts. Each inspector “has a microscopist attached to him and the microscopist has a small laboratory located in a hospital in the district.” Also, a regular free distribution of quinine had been organized, usually by a *feldscher*. The same *feldschers* were also in charge of taking blood samples to be analyzed by the microscopist who referred the results of the examinations to the distributors.

All ten districts declared “infected” by the National Public Health Service had to contribute “five percent of their total budget to a so-called Malaria Fund.” In the areas surrounding Varna, Bourgas, and Plovdiv, the government concentrated its efforts by undertaking some very large drainage programs. According to Gunn however, this project “is somewhat out of proportion when one considers the cost involved.” The same amount of money, in fact, might have been spent more usefully in a larger number of communities, giving aid to a much larger population.

However, despite all the good intentions, some aspects of the struggle against malaria remained quite naïve. The Malaria Law, for example, required that, in the infected districts, some preventive measures such as oiling, ditching, and draining were carried out by the people living in the community.<sup>9</sup> As a matter of fact, “the oiling is usually done by schoolchildren, and prizes are given to schools where the children are particularly active in abating nuisances which would permit the breeding of mosquitoes.” For sure, a more satisfying organization of the oiling operations might come from the employment of so-called *trudovacks*.

The end of the war brought about the abolition of conscription. In order to bring together the different social classes of the country, Stamboliiski presented to the Parliament a project which reshaped an already existing Compulsory Labor Law. This law required all men between twenty and forty to work a total of six months for the government, while unmarried females between the ages of sixteen and thirty were required to work four months. The greater part of this labor service was “in connection with the building of roads, railroads, school-houses, and other public buildings, draining marshes etc.” Thanks to this law a great deal of labor “in connection with the suppression of malaria is done by ‘*trudovacks*.’”<sup>10</sup>

At the end of his sojourn, Gunn was ready to forward some recommendations to the IHB in New York. Bulgaria, a small country, about the size of Ohio, suffered from the disasters caused by a series of wars and “was struggling to get on its feet and the outlook seems encouraging.” According to the RF representative, the Agrarian Party was “intensely interested in the welfare of the country,” even if it would be unsafe to prognosticate what steps its “brilliant and audacious” leader, Stamboliiski, may undertake.

Turning his attention to the specific purpose of his trip, Gunn admitted that “the Public Health organization of the country at the present time leaves much to be desired, but progress is to be noted in every direction of health work and considerable credits are voted for these purposes.” Numerous were the sanitary deficiencies that required urgent interventions.

In a letter addressed to Gunn, the director of Public Health, Doctor V. Georgieff, had summarized them, indicating how the RF might intervene:

- 1) Young Bulgarian doctors might be sent abroad at the expense of the RF, to specialize for a period of two or three years.

- 2) A few higher officials might be sent on a mission to enable them to study hygiene and sanitary organization.

3) The RF could provide material assistance for the construction of an Institute of Hygiene, an essential structure lacking in Bulgaria.

4) A RF delegate could serve as a technical adviser to the Directory of Public Health.

5) The organization of a Health Service to collect data in a given Department, during a period of several years, in accordance with the methods of the IHB.

Gunn was in favor of the idea that the RF's IHB grant to the National Public Health Service "a limited number of fellowships," initially four. He was not equally positive about the other proposals, because they involved considerable expenditures of money, better planning and a more pondered final decision about what might be taken "for the time being." The request, instead, "to have the Foundation send a temporary delegate to Sofia to act as a Technical adviser to the Public Health Service," was an excellent thing to do. In conclusion, Gunn wrote, "I see many reasons why the International Health Board may well include Bulgaria at this time in the list of countries in Europe with which it is cooperating." A cooperation, albeit, to be started in a modest way.

The IHB accepted Gunn's point of view and, in 1924, four fellowships were granted to four Bulgarian doctors: the first to receive one was Kosta Drensky, a well-known malariologist.<sup>11</sup> Again following Gunn's advice, in May 1926 a second notable step was made with the IHB's decision to contribute to the construction of a Central Institute of Hygiene or Public Health Laboratory in Sofia.<sup>12</sup> Finally, in 1928, the IHB made its most challenging decision: "At its meeting on February 10, 1928 the Executive Committee approved Budget N° 64387 for a Field Station in Malaria at Petrich, Bulgaria, for the period February 1 to December 31, 1928, amounting to 1,104,000 Levas and appropriated \$8,100 (1,104,000 Levas) to be used in carrying out its provision."<sup>13</sup>



The plan of establishing a station at Petrich, a town close to the Grecian and Yugoslav frontiers, was defined by points on which the IHB and the Bulgarian directory of Hygiene had agreed:

- “a) The Foundation will lend a malaria expert to supervise the organization and program of the station.
- b) The Direction of hygiene will lend an expert to be charged with the resident direction of the station. The personnel is [are] to be Bulgarian.
- c) The government will provide a building as a laboratory and living quarters for personnel.
- d) The station shall be considered an integral part of the national malaria service. It shall be autonomous in so far as its own program and work is concerned and answerable only to the authority of the inspector general of malaria.
- e) The area of Petrich with as many of its surrounding villages as shall be deemed desirable shall be allotted to the purpose of the study.
- f) The budget for this station shall be supported by the Foundation alone through that period during which the work is distinctly experimental and investigative in nature. This period is estimated at three years.”<sup>14</sup>

Along with Gunn, the great architect of the operation was his Paris Office Assistant, Dr. Ralph R. Collins, who had conducted pioneering experiments in quinine treatment in Alabama and Georgia, along with the malaria luminary Samuel Taylor Darling.<sup>15</sup> As a matter of fact, Collins had joined the European field staff of the IHB in 1926 and was assigned to Bulgaria and Turkey.<sup>16</sup>

The first report drafted by Collins described a difficult situation: “The entire area under study, which was the one suffering most acutely at the present time from malaria, lies within a radius of twenty-five kilometers of the confluences of the Struma Rivers.” In order to better organize the control of the disease, the area was divided in three geographically distinct sections comprising seven villages:

- 1) Demidovo, Kolarovo
- 2) Orman, Shirbamovo and
- 3) Marinopole, Tchutchuligovo and Kulata.<sup>17</sup>

With the arrival in Petrich of the field inspector, Dr. Angel Drenovsky, an expert malariologist trained in Germany, the guidelines were immediately set up:

“The program of the works of the station as at present conceived consists of the following principal items.

- 1) Determination of the splenic and parasite indices probably semiannually—April and November.
- 2) Mapmaking for all villages under routine observation.
- 3) Routine catches twice weekly in picked and permanent stations in each village for:  
a) Adult mosquitoes; b) Larvae.
- 4) Establishment of the infection rate of the various species of mosquitoes found in the area.
- 5) Studies of mosquito habits, feeding, etc.
- 6) The determination of some specific methods of anti-malaria campaigns to be undertaken for each area during the coming year.”<sup>18</sup>

Despite the many specific difficulties met on the ground, and the political instability that characterized Bulgaria in the early 1930s,<sup>19</sup> Collins and his team obtained considerable results in Petrich, in terms both of sanitation of the monitored area, and of data collected concerning the modalities of diffusion of the disease.

In a densely detailed series of annual and quarterly reports forwarded to the IHB, rich with tables, statistics and often photos, Collins documented all the initiatives carried out by the Petrich Malaria Station. These reports contained a vast range of components, from blood and spleen indexes examinations over the district population to quinine distribution; from mosquitoes catching, classification, and dissection to Paris Green spraying operations; and from rice fields watering control to bridges and canals construction. A great deal of data is reported and sometimes faced failures, as well as the many changes introduced during the experiment. At the end of a decennial experience, Collins was able to outline a final balance marked by undisputable successes.<sup>20</sup>

In his final report on the Petrich Malaria Station experiment, Collins describes how, in the spring of 1928, after the IHB involvement in the project that “a nucleus staff for the new Station [has] been selected, the building was begun and the preliminary surveys of the area were undertaken.”<sup>21</sup> The history of the station can be divided into four distinct periods: From 1928 to 1930, most of the work was dedicated to preliminary observations of a demographic, sanitary, topographical, and meteorological nature. In the second period, from 1930 to 1935,

after examinations made on school children revealed that the area had a “degree of infection perhaps greater than that encountered in any other part of the country,” an anti-larva program was started.

In order to better understand the dynamics of the spread of malaria, “a decision had been taken to divide the district into three zones. One of these zones having in it two villages was to serve as a comparison or control zone. The other two zones containing five villages were to form the protected or experimental area.”

At the same time, a great deal of drainage works were executed, thanks to the arrival of Frederick W. Knipe, an American malaria-control engineer working in the Balkans for the RF.<sup>22</sup> This led “to decreasing the vast areas of marsh and swamp land which had proven too extensive for control by simply Paris-Greening.” As Collins clearly pointed out:

“The effort to control the vast amount of waste and irrigation water in the protected area has been the principal interest of this experiment. Without a concerted program directed to the permanent elimination of as many as possible of these *anopheline* breeding areas as anti-larva program based solely upon temporary measures of greening, oiling, etc., would have been not only physically impossible, but far beyond the ability of the community to support.”

The greatest share in the performance of the drainage work was born by the Trudovacs Labor Corps, permanently assigned to the Station.

From 1935, the RF’s local representative was withdrawn from active participation in the conduct of the Station’s activities, so the routine procedures were carried out by the local district health officers. The final period begins in 1938, when the RF support ceased and the Station’s budget was provided entirely by the national government.

In the end, the field experiment in malaria control based on anti-larva methods covering the entire valley area, for fifteen miles, along the Strumitza and Struma Rivers, and involving a population of some 16,000, gave more than encouraging outcomes and possibly a lesson: “With Trudovac labor and competent engineering and technical guidance,

government could today establish a ten year plan for malaria control by *antilarva* methods with almost complete assurances of as great or greater success than that obtained at Petrich.”

Another source, a letter addressed to Collins signed both by Roussi Radkoff, Director of Health, and Kosta Drensky, Chief Malariologist, summarized in a very eloquent way the activities carried out during this period:

You know that in Petrich, with the means of the Rockefeller Foundation was organized the fight against malaria, which went on for a period of ten years. The results of the work are more than satisfactory. The cases of malaria found at first to be from seventy to eighty percent of the population, was brought down to ten to twelve percent. About 20,000 decars of swamps and damp places, which before were seats of malaria, were made healthy, and now they are the most fertile pieces of land and sources of welfare for the population. The achievement of sanitary and economic point[s] of view are [were] great. A population of about 16,000 was saved from hunger and degeneration.<sup>23</sup>

The Bulgarian people realized and highly appreciated what the RF had done for them. In fact, in Petrich, one street was named for Mr. Rockefeller and another for Dr. Collins, and the village school in Topolnitza, bears the name of Dr. Collins—all in an expression of gratitude and recognition.

*Editor's Note:* This research report is presented here with the author's permission but should not be cited or quoted without the author's consent.

Rockefeller Archive Center Research Reports Online is a periodic publication of the Rockefeller Archive Center. Edited by Erwin Levold, Research Reports Online is intended to foster the network of scholarship in the history of philanthropy and to highlight the diverse range of materials and subjects covered in the collections at the Rockefeller Archive Center. The reports are drawn from essays submitted by researchers who have visited the Archive Center, many of whom have received grants from the Archive Center to support their research.

The ideas and opinions expressed in this report are those of the author and are not intended to represent the Rockefeller Archive Center.

## ENDNOTES:

---

<sup>1</sup> Bulgaria was required to abandon all the lands occupied during the conflict: Western Thrace was returned to Greece, Southern Dobruja to Romania, and the Western Outlands to the Kingdom of Yugoslavia. By the end of the war, while more than fifteen percent of the Bulgarian population lived outside the national borders, the reversion of the territories occupied during the war produced a wave of refugees, many of these living in “appalling conditions on the southwestern border of Bulgaria,” and creating a dramatic sanitary emergency. See: R. J. Crampton, *A Concise History of Bulgaria*, U.K.: Cambridge University Press, 2005, pp. 144-153.

<sup>2</sup> Rockefeller Archive Center (RAC), Sleepy Hollow, Rockefeller Foundation (RF), Record Group (RG) 1.1 Projects, Series 711 Bulgaria, Box 1, Folder 1, S. M. Gunn to F. F. Russell, Paris, May 1, 1923.

<sup>3</sup> RF, RG 1.1 Projects, Series 711 Bulgaria, Box 1, Folder 1, Selskar M. Gunn, *Public Health in Bulgaria*, March 1923. Gunn drew much of the information concerning the political situation in the Balkans from Paul Scott Mower, *Balkanized Europe: A Study in Political Analysis and Reconstruction*. New York, 1921. Mower was a correspondent for the *Chicago Daily News* during the first Balkan War.

<sup>4</sup> About the social consequences of the post-WW I migrations, see: Michael Robert Marrus, *The Unwanted European Refugees from the First World War Through the Cold War*. Philadelphia, Pennsylvania: Temple University Press, 2002, pp. 44-49.

<sup>5</sup> Gunn provided detailed information concerning the Bulgarian national budget for the fiscal year ending in April 1923, reporting expenditures and income. See: Gunn, *Public Health*, pp. 14-16.

<sup>6</sup> Gunn, *Public Health*, pp. 54-58.

<sup>7</sup> In 1926, Ivan Golosmanoff published for the Health Organization of the League of Nations a work describing his experience as Chief of the Division of Infectious Diseases: *The Public Health Services of Bulgaria*, Series of the League of Nations Publications, Vitte, 1926.

<sup>8</sup> According to official data given by Gunn, in 1921, the cases of malaria treated only in public dispensaries were 73,855, with 156 deaths.

<sup>9</sup> Oiling of water surfaces was a diffused anti-mosquito measure, especially when proper works of drainage could not be made. The purpose in oiling was to destroy larvae of mosquitoes. The thin film of oil over the top of water surfaces prevents mosquito breeding in two ways: mosquito larvae in the water cannot penetrate the oil film with their breathing tube, and so they drown and die; also adult mosquitoes do not lay eggs on the oiled water. Light oils such as kerosene were commonly used. Soon after the discovery by Ronald Ross that malaria was transmitted by mosquitoes, this technique, along with other measures, was massively adopted during the construction of The Panama Canal, under the supervision of Colonel William C. Gorgas, chief sanitary officer of the canal project. See: William C. Gorgas, “Malaria Prevention on the Isthmus of Panama.” In Ronald Ross, editor, *The Prevention of Malaria*. New York: E.P. Dutton & Co., 1910, pp. 346 -352.

<sup>10</sup> Gunn refers that in 1921, “7895 men were taken on for six months’ periods. These men worked only on State work. It was the first contingent and they gave to the State 246.452 days of labor.” While it was too early “to give an opinion as to the value of this interesting experiment,” Gunn wrote “indications at the present time are distinctly in its favor.” See: Gunn, *Public Health*, p. 118.

<sup>11</sup> RF, RG 5.3, Series 711, Box 246, Folder 2973, Bulgaria—Annual Report 1936. From 1924 to 1934, thirty-seven doctors or specialists in other public health fields received IHB/RF fellowships usually spent in the U.S., or in specialized research centers in Europe. At their return, most of the doctors found employment in national institutions until, at least, the 1934 coup orchestrated by Colonel Damyan Velchev: “The Military regime which openly did everything possible to eliminate former fellows from service has been replaced by a more normal authority which is making a serious attempt to correct the disasters caused by its predecessors. Dr. Radkoff, the present Director of Health, himself a former fellow, has effected some changes in this respect.”

---

<sup>12</sup> RF, RG 1.1 projects, Series 711, Box 1, Folder 3, Bulgaria—Institute of Public Health. On April 10, 1926, Gunn informed Dr. Collins, RF representative in Bulgaria, about a letter from the General Director of Public Health, Doctor Ivan Kessiakoff, concerning the decision to start the construction of a Central Institute of Hygiene or Public Health Laboratory in Sofia: Gunn felt that “the time is fast coming when we should cooperate with the Bulgarian Government in this matter.” He also suggested the names of two RF fellows, Doctor Michailoff and Doctor Abadjieff, who might be useful to this project. See: RF, RG 1.1 projects, Series 711, Box 1, Folder 3. Gunn to Collins, April 10, 1926.

<sup>13</sup> RF, RG 1.1 projects, Series 711, Box 2, Folder 4, Revision of Budget NO. 64387-Filed Station in Malaria-Petrich-Bulgaria, August 9, 1928. See also: RF, RG 1.1 projects, Series 711, Box 1, Folder 4: Strode to Russell, January 18, 1928, Proposal for the Establishment of a Station for Field Studies in Malaria at Petrich, Bulgaria, by Collins.

<sup>14</sup> RF, RG 1.1 projects, Series 711, Box 2, Folder 4, Bulgaria-Malaria Station-Petrich-Appropriation and Budget, September 2, 1928

<sup>15</sup> See. Ralph K. Collins, “Experience with Intensive Quinine Treatment under Field Conditions.” In *Southern Medical Journal* 19 (May 1926), pp. 383-392. In November 1926, Collins had already visited the country escorted by two Bulgarian officers of the Minister of Public Health in order to verify the feasibility of the project. See: RF, RG 5, Series 1.2, Box 311, Folder 3949, Extract from Dr. Collins Diary of Bulgarian Trip.

<sup>16</sup> The Rockefeller Foundation Annual Report 1926 (New York, 1926), p. 79.

<sup>17</sup> RF, RG 5.3, Series 711, Box 245, Folder 2963, Report of Malaria Study Station, Petrich-Bulgaria, January, February, March 1928.

<sup>18</sup> RF, RG 5.3, Series 711, Box 245, Folder 2963, Report of Malaria Study Station, Petrich-March 1 to June 30, 1928, Bulgaria, 1928.

<sup>19</sup> In 1934, from Colorado, where he was on vacation, Collins informed Russell “the coup occurred on Sunday.” From information coming from the secretary, the coup “seems to have been gratefully accepted by all political leaders as a means of leading them out of the impasse to which party government had come.” Two things were most concerning the RF presence in Bulgaria: first, “the removal of Dr. Kessiakoff and the appointment of a thirty-five-year-old military man by the name of Gerorges Ivanov.” Nevertheless, the new director, in his first interview with the press, “declared himself as committed to the ‘American system’ of preventive medicine as opposed to curative medicine.” Secondly, “the resignation of Dr. Balkanski.” Not knowing whether this decision was “voluntary or forced,” in Collins’ view “the departure of Balkanski and his little clique of ‘Americanized’ workers from the direction is causing a great deal of consternation.” See: RF, RG 1.1 projects, Series 711, Box 1, Folder 4, Collins to Russell, June 15, 1934.

<sup>20</sup> RF, RG 1.1 Projects, Series 711, Box 2, Folders 15-20, Petrich (Field Station); RG 5, International Health Board/Division, Series 3—Special Reports, Series 711 I (Bulgaria Malaria), Boxes 245-246, Folders 2963-2975.

<sup>21</sup> RF, RG 1.1, Series 711, Box 2, Folder 20, R. Collins, *A Report of a Practical Experiment in Antilarval Malaria Control in Bulgaria*.

<sup>22</sup> RF, RG 5.3, Series 711, Box 245, Folder 2967, Report of the Station for Field Studies in Malaria, Petrich-Bulgaria, 1930.

<sup>23</sup> RF, RG 5.3, Series 711, Box 245, Folder 2963, Report on Report of the Station for Field Studies in Malaria, Petrich-Bulgaria, 1930.