

CHREV. 142

## NEW DATA ON M. S. TSWETT'S LIFE AND WORK

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(Received October 18th, 1980)

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### 1. INTRODUCTION

Previous publications contained detailed accounts of the most interesting aspects of M. S. Tswett's life and work<sup>1-6</sup>. It has now become possible to complement them with some new data and documents relating to various stages in his interesting life, which are of particular interest in combination with those already published. The photographs contained here have never been published before and are probably the last that will be found\*.

### 2. BIOGRAPHICAL DATA

No new information on M. S. Tswett's mother is available. The application from I. Hais<sup>7</sup> to the municipality of Kütakhia (Turkey), where Marija (Nikolaevna) (de) Dorozza was born in 1856, added nothing new to what was already known because the municipal archives were destroyed at the end of World War I. Italians had settled in that area since the time of the Roman conquest and traditionally constituted part of the population of these Mediterranean cities.

A considerable amount is known about S. N. Tswett, his father. He was one of six sons of a well known purveyor from the city of Chernigov who had the right to purvey honey to the Tsar's court and obtained the title of an honorary citizen of Chernigov. After graduating from Tartu University, S. Tswett went into finance and without any patronage he obtained high administrative ranks and titles solely as a result of

\* Particularly due to the death of E. A. Lyaschenko, M. S. Tswett's niece, in June 1979, who previously was kind enough to make available most of the photographs of M. S. Tswett known at present and to provide a variety of information about him and his family.

his personal abilities, perseverance and integrity. Finally, he became a full Councillor of State. As S. N. Tswett was opposed to corporal punishment, he was asked to leave a ship during a round-the-world trip in 1861. He was well known in the literary community, in particular by I. S. Turgenev. A. P. Kern, to whom A. S. Pushkin dedicated one of his beautiful poems, wrote very affectionately about S. N. Tswett<sup>8</sup>. He disputed the then seditious idea of separating the Church from the State, which led to his forced and prolonged resignation. For a while S. N. Tswett was Russia's trade representative in Genoa. In the last few years of his life he was Chairman of the Tavria Fiance Department (Simferopol). Soon after his retirement he died in Yalta on April 24th, 1900, where he was buried at the Ioanno-Zlatoustov cemetery. After S. N. Tswett's death his wife was granted a large pension, which enabled her to give her children an education. In particular, Nadezhda and Vera graduated from the Sorbonne University in Paris. S. N. Tswett's noble title is confirmed by the fact that his sons Alexander and Vladimir, who became officers in the navy and the air force, respectively, were permitted to use the double name of Tswett-Kolyadinsky.



Fig. 1. M. Tswett with his nanny, Lausanne, 1873.

It is noteworthy that M. S. Tswett's interests had already been formed during his schooldays. His grammar school certificate, obtained in 1891, reveals that he had grades 3 in geography and history, grades 5-5.5 in languages and physics and a grade 6 in chemistry\*.

Moreover, this certificate contains additional information on an intricate question, the date of M. S. Tswett's birth. It indicates the date as May 19th, 1872. A similar date is mentioned in the letter from M. S. Tswett to Briquit, sent from Moscow in 1916. The use of this date is related to the fact that it is indicated at the beginning of the birth certificate, issued in Asti, meaning that the document was prepared on May 19th; however, in the middle of the text, there is an indication that M. Tswett was born at 11.30 on May 14th. Most documents, including the official ones, contain a correct indication of this date of May 14th, 1872.

M. S. Tswett's wife, Helen Trusevitch, the daughter of a teacher from Sedlets boy's grammar school, was born on May 20th, 1874, of noble origin and Orthodox denomination. Their marriage, registered on September 16th, 1907, was very happy although childless.



Fig. 2. M. Tswett, Lausanne, 1876.

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\* Found in the Kazan archives and published by M. S. Vigdergauz<sup>9</sup>.

POST TENEBRAS LUX

**COLLEGE DE GENEVE**

Division Supérieure (Gymnase)

**CERTIFICAT DE MATURITÉ**

de la Section Réale

*Jeus soussignés certifions que M<sup>r</sup> Michel Tswett*  
*a subi dans la session de Juin 1891 les examens réglementaires*  
*sur les branches suivantes:*

Branches	Chiffres obtenus	Observations
Langue & littér. françaises	4.88	Date de la Naissance
" " allemandes	4.88	le 19 Mai 1872
" " anglaises	5. —	Nationalité
" " latines	5.50	Russe
Histoire	3.25	
Mathém. Cosmogr.	2.25	
Géographie	3. —	
Sciences naturelles	5. —	
Physique	5.50	
Chimie	6. —	
Philosophie	—	

*Vote générale Satisfaisant*

*Ce fait de quoi nous lui avons délivré le présent Certificat*

GENÈVE, le 17 Juillet 1891

Le Conseiller d'Etat  
 Chargé du Dép. de l'Instruction Publique:

Le Directeur du Collège

EXTRAIT DU RÈGLEMENT

6 très bien 5 bien 4 satisfaisant 3 médiocre  
 2 mauvais 1 très mauvais 0 nul

Fig. 3. Tswett's college-leaving certificate<sup>9</sup>.

More detailed data on how M. S. Tswett passed his examinations and defended the Master's Thesis at Kazan University are noteworthy<sup>9</sup>. Basic facts have been given before in a concise form<sup>4,6</sup>. It was noted, in particular, that almost immediately after he had defended his Thesis, M. S. Tswett handed in an application for the post of Privat-Docent at Kazan University. However, it was not precisely indicated on whose initiative this was done. The University records even contain an indication of the possible subject, "A History of Fecundation in the Vegetable Kingdom Related to the Questions of Heredity and Variability of Them", and Professor N. Sorokin agreed to make his audience and teaching aids available. It seems that no-one objected, but the routine formalities took a long time, as usual, and by the time an affirmative decision was made M. S. Tswett had abandoned the formal procedure and was in Warsaw by the end of October 1901. Apparently, he received an invitation from Professor D. I. Ivanovsky, who had just become Head of the Botany Catedra of Warsaw University. Later, when the vacancy at Kazan University was announced, M. S. Tswett did not apply for it.

But for his hurried departure from Kazan, his life might have been very different.

Shortly afterwards, in September, 1903, he applied for the post of Head of the Plant Physiology Department at the Novoarkhangelsk Institute of Agriculture and Forestry, but did not obtain the appointment because of the unfavourable references given him by Professor V. K. Zalessky, as mentioned before<sup>1</sup>.

M. S. Tswett first introduced his chromatographic method to German scholars when he addressed a meeting of the German Botanical Society on June 28th, 1907, in Berlin during his 4-month mission to the Botanical Gardens in Berlin and Kiel.

Professor V. V. Kurilov, invited as an additional opponent along with Professor D. I. Ivanovsky and Professor V. F. Khmelevsky to take part in the defence of

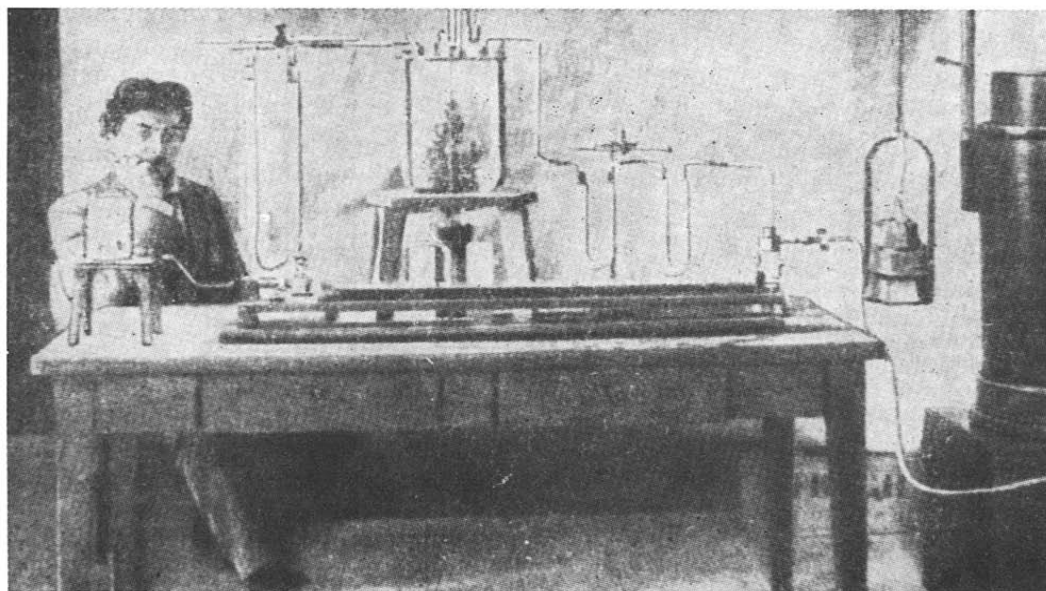


Fig. 4. M. Tswett in the Botanical Laboratory, Geneva, 1896<sup>10</sup>.

<sup>10</sup> L. S. Ette has found that on this meeting M. Tswett showed chromatograms of chlorophylls.

M. S. Tswett's Doctor's Thesis in 1910, made an interesting critical comment, contained in his reference: "...It would be highly desirable, before using this method in the division of chlorophyllins, to test it with regard to pigments with a strictly established chemical individuality".

The unusual presentation of relationships and the novelty of the concepts and terminology, unacceptable to the representatives of a traditional school, induced



Fig. 5. M. S. Tswett with his step-mother, Yalta, 1900.





Fig. 6. M. S. Tswett with his step-mother, brother and sisters, probably Yalta, 1900.



Fig. 7. Master of Sciences diploma issued by Kazan University<sup>9</sup>.

V. V. Kurilov to make an ironic comment: "It is absolutely impossible to read the Thesis without a dictionary of new terms and expressions, which is not appended to the Thesis". He pointed out in his conclusion, "If I ventured to indicate the author's slips and errors in some physico-chemical questions it should be recalled that he who makes no mistakes, never achieves anything. The author did show diligence and his numerous experiments prove that he is a hard-working and assiduous person". "...I would be quite satisfied if my humble instructions somehow do my much-esteemed colleague M. S. Tswett a good turn in continuing his interesting and promising research in the difficult field that is the object of his study".

After the defence of his Doctor's Thesis, M. S. Tswett applied unsuccessfully for the appointments of Head of Catedra Botanique at Moscow University (1911) and Novorossiisk University (1915), and refused the offer of a similar appointment at

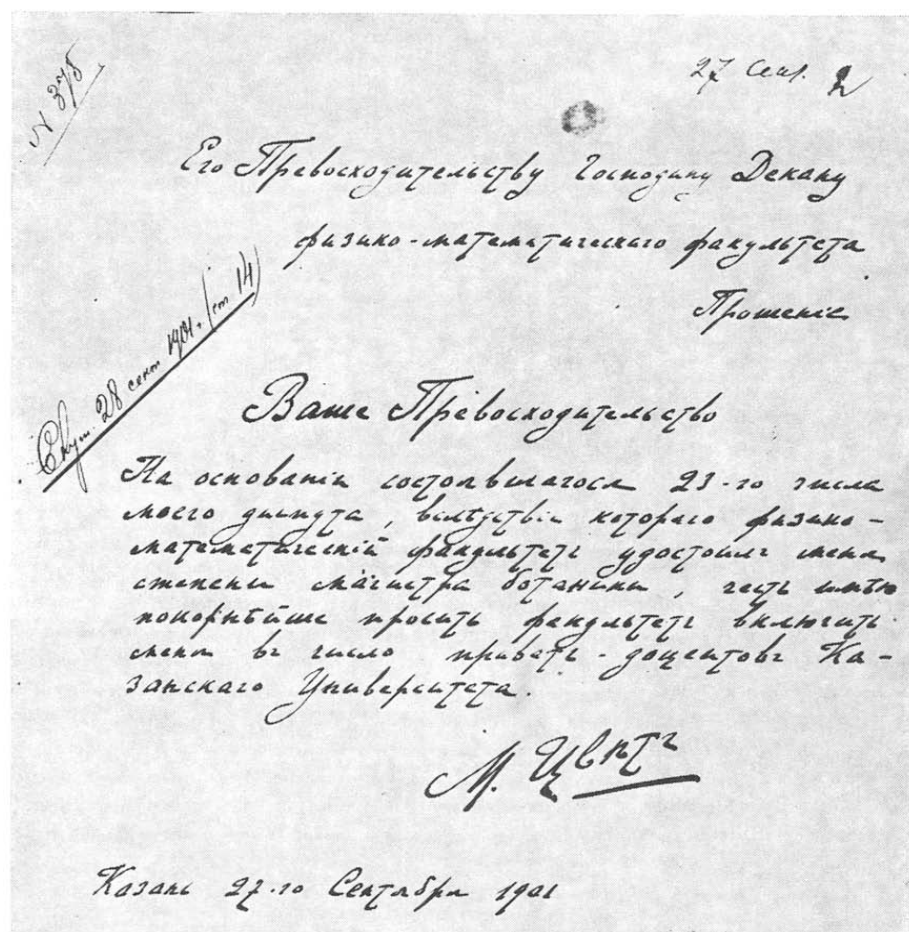


Fig. 8. M. S. Tswett's application for the post of Privat-Docent at Kazan University.

\* Leninskaja Biblioteka, Division of manuscripts, "fond" 146.



Tomsk University (1914) due to the cold climate, and only in 1917 did he become Director of the Botanical Garden at Tartu (Derpt) University.

M. S. Tswett was not a particularly ambitious person, and his desire to obtain a Chair was natural, especially if account is taken of his wish to devote himself totally to scientific work notwithstanding his failing health.

It is interesting to note that according to chromatograms presented in his Doctor's Thesis M. S. Tswett obtained under optimal conditions an efficiency of about 2000 theoretical plates for a column of 5 cm length.

Among the previously unknown articles written by M. S. Tswett during the last years of his life, a small newspaper article was found, entitled "On the question of establishing the Nyzhnechorod Society of Natural Scientists", where he supports this society as a means of uniting all the scientific forces. In particular, he wrote, "As for the tasks of the new society, they should be outlined as broadly as possible, precisely to ensure the most productive interaction of the scientific forces. All natural scientists of every shade are united by a love of nature, in its particularities or eternal laws, which makes communication between people of very different mentalities possible"<sup>11</sup>.

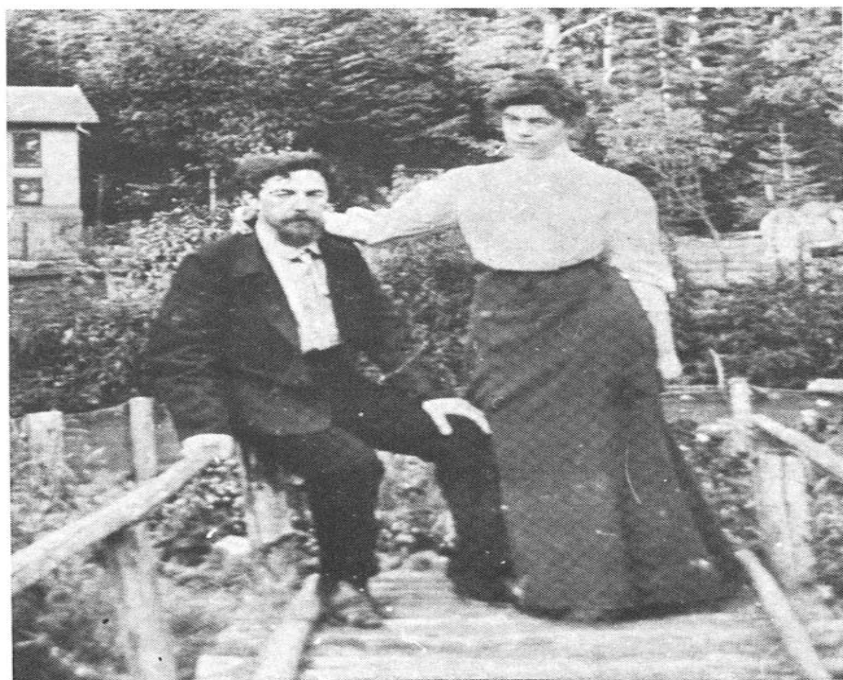


Fig. 9. M. S. Tswett with his wife in Switzerland, around 1908.

For his irreproachable service, M. S. Tswett was decorated with the orders of Stanislav 3rd Degree, St. Anna 3rd Degree and Stanislav 2nd Degree. Such awards, however, were given almost automatically in the Tsarist Russian Civil Service.

A much more important event was the winning by M. S. Tswett of the M. N. Akhmatov Academic Prize in December 1911, for his book entitled "Chlorophylls in the Plant and Animal World".

### 3. LETTERS TO C. CLAPAREDE\*

These letters were obtained by I. Hais and handed to the present author with permission for partial use: some have been referred to previously<sup>12</sup>.

Professor Claparede, M. S. Tswett's fellow student at university, was his closest friend and the letters obtained by I. Hais, are only a small part of an extensive correspondence.

In the letter from St. Petersburg, August, 17th, 1897, M. S. Tswett tried to persuade his dear friend Edward not to limit himself just to his stay in Moscow at the Congress but to be sure to visit St. Petersburg as well. "I assure you that St. Petersburg is a much more interesting city than Moscow. Moreover, there are very fine environs, the famous Peterhof Palace, which, Russians believe, surpasses Versailles in its beauty". It is not known whether Claparede ever accepted that invitation.



Fig. 10. M. S. Tswett with his wife in Valdeg, Switzerland.

\* The letters are kept in the Municipal and University Libraries of Geneva. Photocopies of them, with permission of Mr. Munier to publish them, were given to Dr. I. Hais.

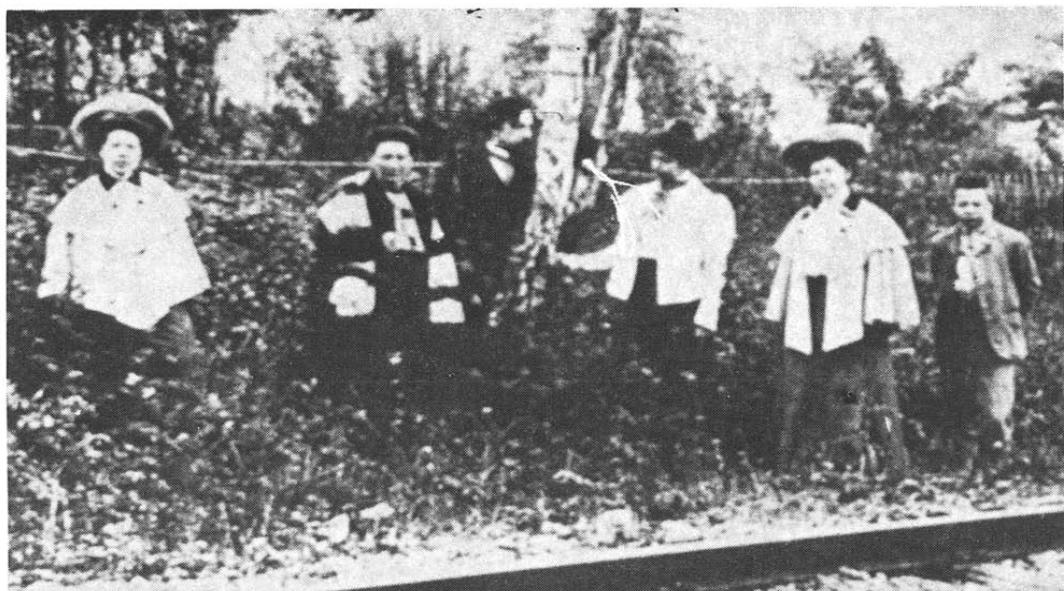


Fig. 11. M. S. Tswett with relatives, around 1908, Valdeg, Switzerland.

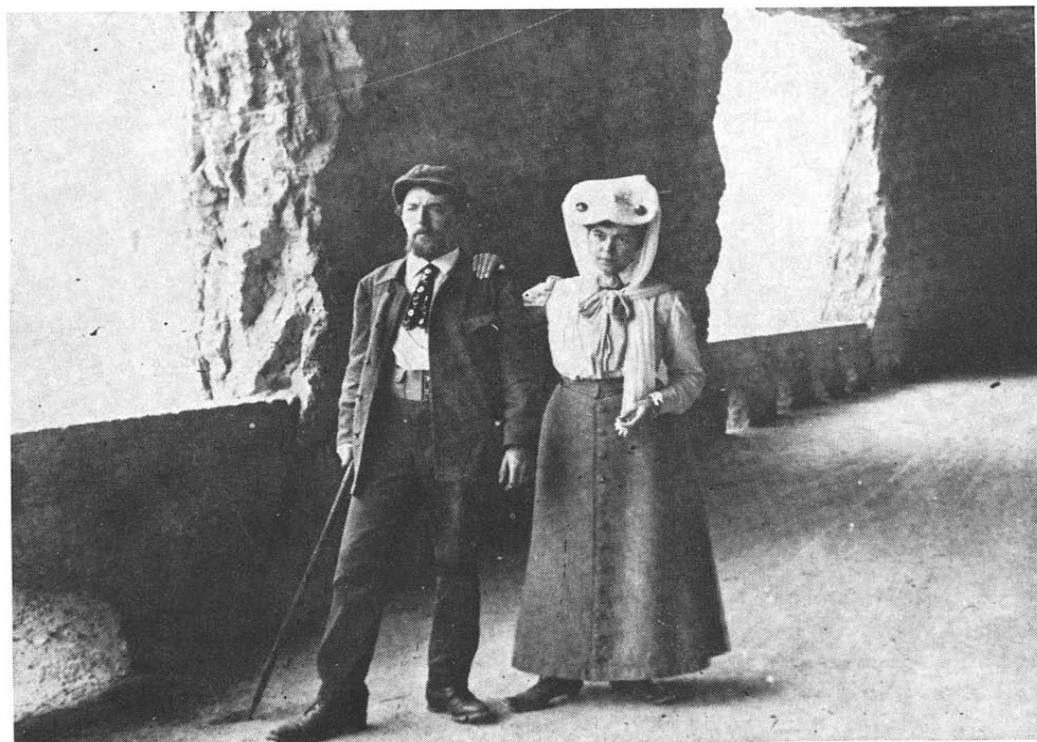


Fig. 12. M. S. Tswett with his wife, around 1908, Switzerland.

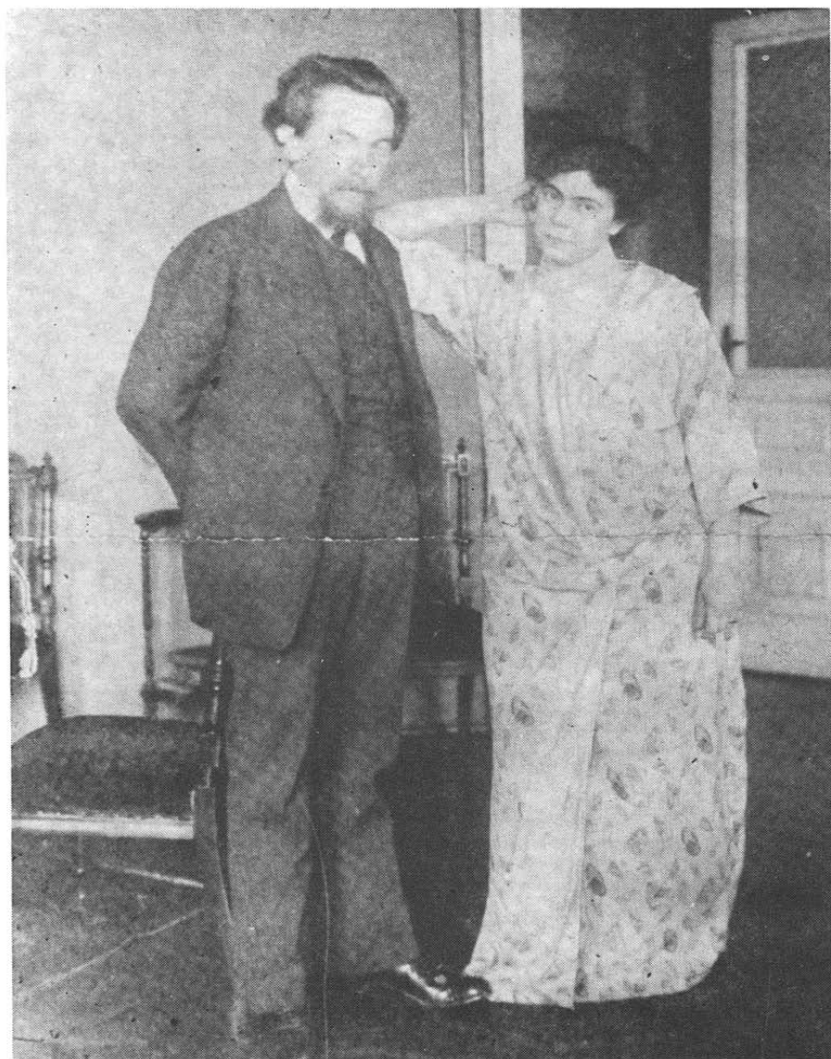


Fig. 13. M. S. Tswett with his wife, Warsaw.

In a letter from Warsaw, March 30th, 1909, after a long discussion of the question of heliotropism, M. S. Tswett wrote about his plans as follows. "Helen and I are planning to leave Warsaw early in July (at present we are moving into a new flat)\* and then to go straight to Geneva..."

If evil fate does not interfere with my plans and upset them, as it did last year, you and I shall meet each other this summer, old chap, under the benevolent skies of Geneva. I feel an extreme need and great desire to come and be absorbed in the recollection of old university days, and to see you, the only good friend that I have".

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\* Before that the Tswetts lived at 6 Krakov suburb, then moved to 7/6 Mokotovskaya Street.

In a letter from Warsaw, April 23th. 1909, M. S. Tswett wrote that his wife had been taken ill with tonsillitis and would come later. As for the regular anniversary of the Geneva University. he wrote as follows: "I believe that Godat might well have had the sense to invite me. too. and the University would not be overcrowded if. besides decorative celebrities that are alien to it, its own alumni came there.

Having no possibility of reuniting on the fifth in the College court. I take comfort in the fact that old friends and boon companions could surely gather at Fritz's or in some other place".

In a letter from Warsaw. May 16th. 1911. M. S. Tswett wrote about his plans



Fig. 14. M. S. Tswett with his wife, Warsaw.



to go to Berlin, Amsterdam, Brussels and Paris in the near future in order to visit the Botanical Institutes and then, after a short stay in Geneva, to go to a picturesque mountain nook in the French part of Switzerland, and asked for a decent and inex-

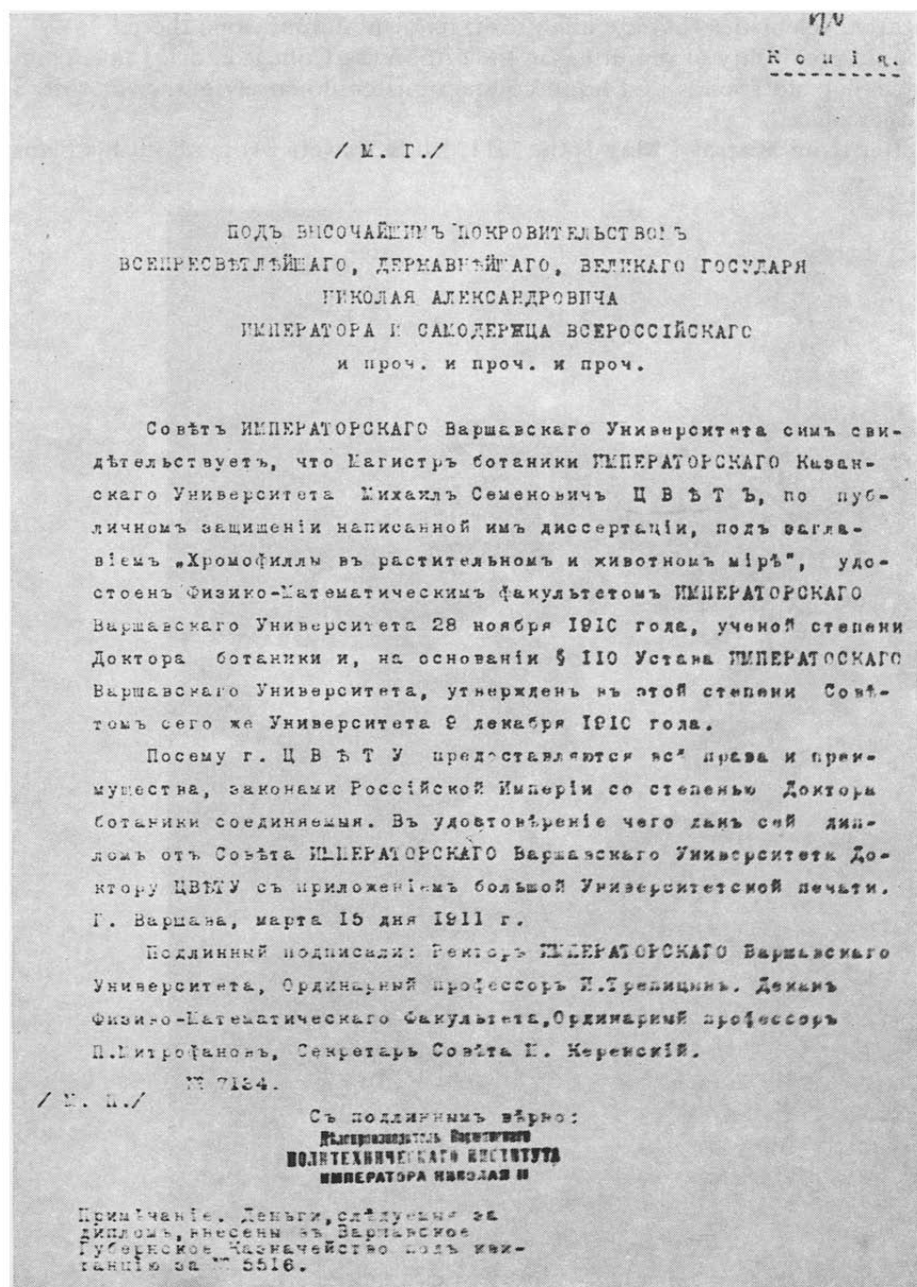


Fig. 15. Certificate of conferment on M. S. Tswett of the degree of Doctor of Sciences (Botany).



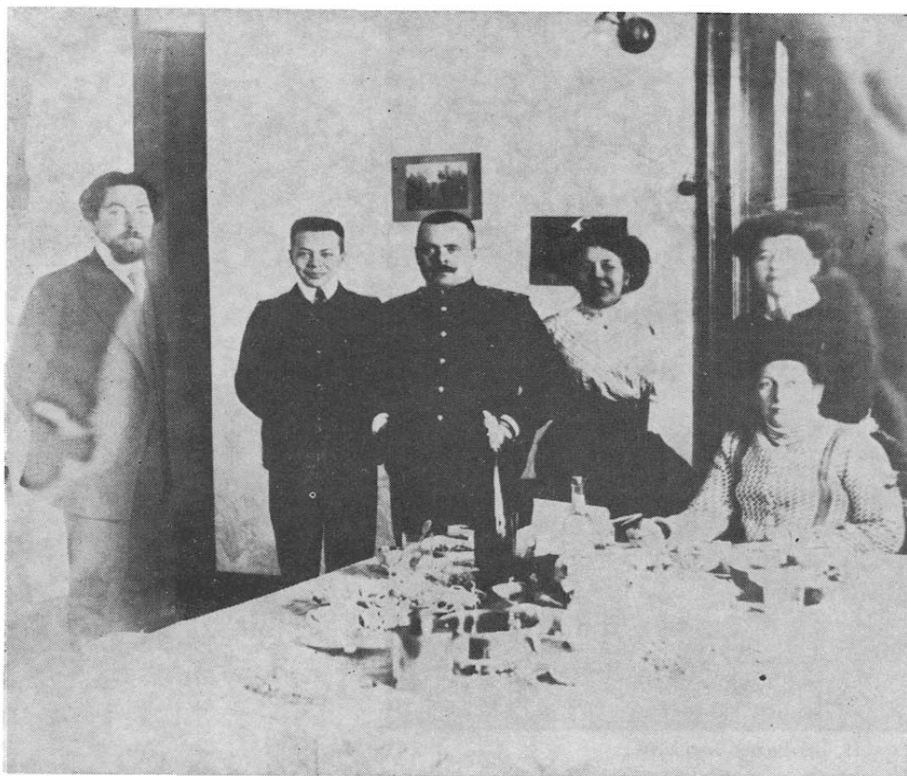


Fig. 16. M. S. Tswett with relatives, Moscow, 1911.

pensive place to be recommended to him. "All in all, it should be a modest sum, something like 5-7 francs a day, including full board and lodging, since Helen and I, as always, belong to the category of those who have to count expenses and our trips abroad are the only luxury we can afford".

From the Adam Hotel, Geneva, Switzerland, June 27th, 1911, M. S. Tswett wrote, "It is entrancing here... I came here in quite bad shape and had to fall back on digitalis and keep to a regime, lying in bed or sitting in a chaise-longue. Now I am feeling better and better".

From the Keller boarding-house, Aigen in Ennstal, Austria, in a letter dated July 24th, 1914, M. S. Tswett wrote, "...Convalescence is still dragging on. Asthma takes no leave of me. Nor does insomnia. Returning to Warsaw is a matter of two to three weeks".

In a letter from Warsaw on December 24th, 1914, first M. S. Tswett expressed his gratitude for help to his brother Vladimir who, apparently, was in Prussia at the initial period of the war. Describing his attitude towards the war, he wrote, "The Prussian beast is hard to muzzle but it will be done in the course of time".

Talking about his return to Warsaw by November 15th, when the classes were due to start, M. S. Tswett wrote that although part of classrooms was taken over by soldiers, the classes kept going on. He also noted better relations between the Russians

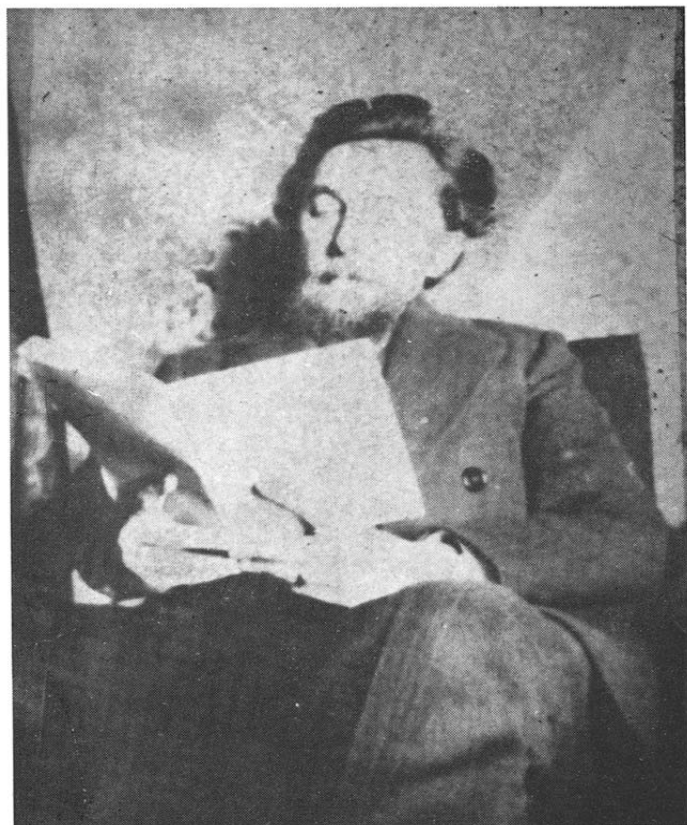


Fig. 17. M. S. Tswett, probably Moscow.



Fig. 18. M. S. Tswett with relatives, Warsaw around 1912.

and the Poles. At the end of the letter he wrote about his continuing bad health: "My health has not improved at all since last year... It takes me at least ten minutes to walk up the stairs to the third floor, but I still manage it and never lose hope of overcoming my illness".

In a short letter from Warsaw of March 18th, 1915, he wrote about the normal work of the Polytechnical Institute and the University, and a certain improvement in his health.



ИМПЕРАТОРСКАЯ

АКАДЕМІЯ НАУКЪ.

Исключенный Секретарь.

29 декабря 1911 г.

№ 1263

Исключенный.

# УДОСТОВЕРЕНИЕ.

Симъ свидѣтельствую, что доктору ботаники профессору Михаилу Семеновичу Цвѣту была 29 декабря 1911 года за сочиненіе его "Хромофилы въ растительномъ и животномъ мірѣ" присуждена ИМПЕРАТОРСКОЮ Академіею Наукъ большая премія имени т.о. М.Н.Ахматова размѣромъ въ 1000 рублей.

Исключенный Секретарь,  
Ординарный Академикъ

Правитель Канцеляріи

Конференціи



За Директора М.Н.Ахматова

Fig. 19. Decision awarding M. S. Tswett the M. N. Akhmatov prize.

From Nizhny Novgorod on January 14th, 1917, he wrote about his hope of obtaining a long-awaited chair at the University and described his life in Nizhny Novgorod: "We have rented two rooms in a lawyer's apartment and count it our good fortune to have decent furniture and be served a digestible dinner. All this is hard enough when one is nearing forty-five but what can I do? Thousands of other people are in a still worse plight due to the war.

On the other hand, thousands and scores of thousands of bourgeois are doing fine and making quite profitable business out of this war".

#### МЕДИЦИНСКОЕ СВИДЕТЕЛЬСТВО

Симъ удостовѣряю, что преподаватель Варшавскаго Политехническаго Института, докторъ ботаники Михаилъ Семеновичъ Цвѣтъ страдаетъ въ настоящее время сильными нервными истощеніемъ и нуждается для возстановленія здоровья въ полномъ отдыхѣ, въ связи съ курсомъ гидротерапіи. Желательно пребываніе на морѣ, а затѣмъ въ горахъ.

Выдается это свидѣтельство для представленія въ Варш. Политехническій Институтъ.

Варшава дня 10 Апрѣля  
1912 года.

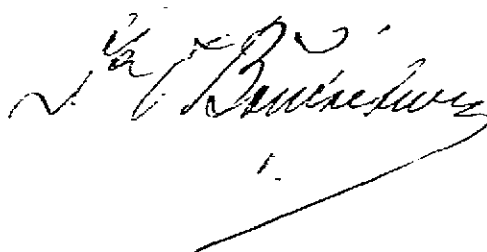



Fig. 20. M. S. Tswett's medical certificate, 1912.

#### 4. M. S. TSWETT'S ILLNESS

The state of M. S. Tswett's health in his childhood was first complicated by a premature birth. However, later he did not suffer from any complaints while living in the damp climate of St. Petersburg. His health started to deteriorate in 1910 due to his natural predisposition and overstrain, resulting from the preparation of his Doctor's Thesis.

Here follows a chronicle of his ever worsening disease, based on documents from his service record<sup>13-15</sup>.

Tswett missed two weeks of classes from September 12th, 1911, because of his illness. On November 25th, 1911, he was operated on by Dr. L. Dmakovsky but, apparently, very unsuccessfully because after that time he was often taken ill for long periods.

His doctor wrote on April 10th, 1912, "Dr. Tswett is now suffering from a serious nervous breakdown and is in need of complete rest for his health to be restored... A stay by the sea and then in the mountains is desirable". Later another doctor identified anaemia and exhaustion due to cardiac weakness.

Despite his serious condition, M. S. Tswett promised to finish his theoretical and practical courses, when requesting leave.

In March 1914, Dr. Pavinsky insisted on the immediate termination of classes, due to M. S. Tswett's intense cardiac insufficiency, and his going to the Nauheim spa for a cure.



Fig. 21. M. S. Tswett with relatives in Taraschi.



Fig. 22. M. S. Tswett with relatives in Taraschi.



Fig. 23. M. S. Tswett (probably in Taraschi, 1915).





Fig. 24. The house in Nizhny Novgorod where M. S. Tswett lived in 1916.

Tswett went to Austria for treatment and at first he felt better but, because of the threat of war, he had to leave and, on his way to Warsaw, on August 19th, 1914, in Smolensk\* he felt so bad that he had to ask for his leave to be extended until September 15th.

M. S. Tswett's health was, undoubtedly, the main reason for his polite refusal in August 1915 to accept the offer of the Main Artillery Department to work at the Department's plants, which would have substantially improved his financial situation. Information on his poor health is also available for subsequent years, in particular April 1917.

After he moved to Voronezh his condition became so bad that he was often unable to attend lectures, and in April 1919 the question arose of granting him a pension because of his illness<sup>15</sup>.

A study of the course of M. S. Tswett's illness reveals that he suffered from progressive heart disease, causing his death under the harsh conditions of the Civil war.

##### 5. TESTIMONIALS OF M. S. TSWETT'S CONTEMPORARIES

All those who were acquainted with M. S. Tswett or knew him well thought very highly of his talent, knowledge, diligence and high moral qualities in combination with a gentle humour.

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\* His address in Smolensk is indicated as the house of Kalsita, Odigitrievskaya Street.



Fig. 25. M. S. Tswett in Taraschi, 1915, with E. A. Liaschenko, his niece, in the centre.

Except for the previously mentioned<sup>1</sup>, manifestly unfair, opinion of V. K. Zalessky (who wrote those words in 1903), all the testimonials by his contemporaries were positive<sup>2</sup>.

<sup>1</sup> It does not mention a purely scholarly discussion between M. S. Tswett and Markhlevsky, Wilstätter, Molisch and Kohl, so vividly recalled by L. S. Ettre, who once again emphasized that the discussion was so heated due to the fact that Tswett's method was too advanced for his time<sup>16,17</sup>.



Fig. 26. Natalia Aristova (Rimas), his sister, married to a doctor (1878-1940).

Thus, the official reference for M. S. Tswett of August 11th, 1913, written by the Director of the Warsaw Polytechnical Institute, stated that "...as a lecturer he showed himself to the best advantage, organizing the teaching of botany on a strictly scientific basis and in an exemplary manner; he knows how to treat students, and, due to his tact, there was never any misunderstanding between them; as a person he possesses high moral qualities, being ardently and disinterestedly committed to his duty; modest though his name is known in science; an industrious, kind and responsive comrade, and, in general, a man of really upright views..."

Professor D. I. Ivanovsky, a prominent scientist and one of the founders of virology, who at the time invited M. S. Tswett to Warsaw University and was, apparently, much closer to him than had been thought: he wrote the following about M. S. Tswett's works as early as 1908: "He succeeded in establishing a highly original method for physical pigments, ensuring a desirable guarantee of their integrity which is not an easy thing to do due to their known extreme lability."

...I can say with confidence that, when a full explanation of the nature of photosynthetic pigments is finally made, this scientific success will be largely due to the work of Mr. Tswett, who prepared the ground for a needed, but yet unsuccessful, chemical investigation.

In general, I presume that Mr. Tswett's scientific works display his maturity

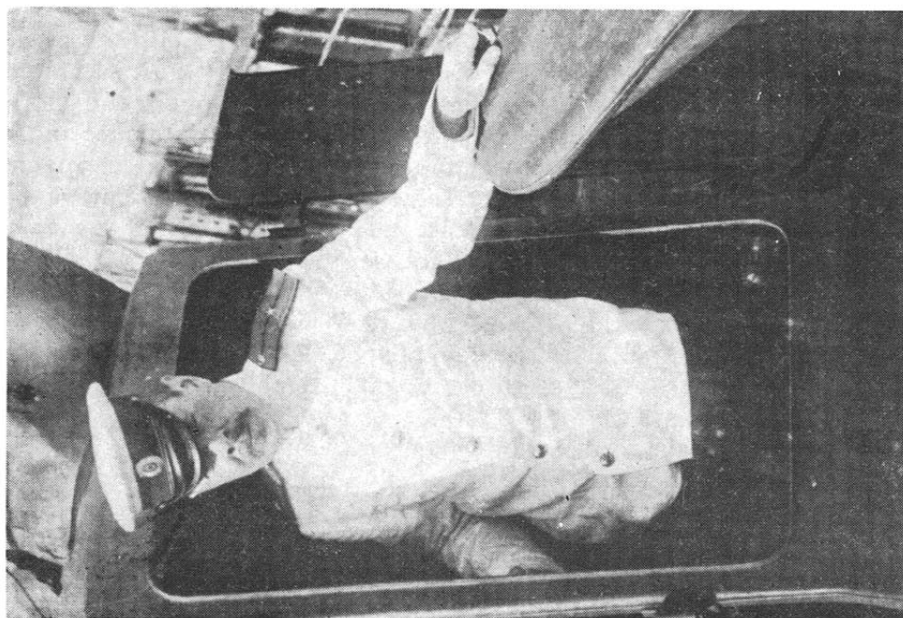


Fig. 27. Alexandr Tsvett-Kolyadinsky, his brother, a naval officer (1882-1912).

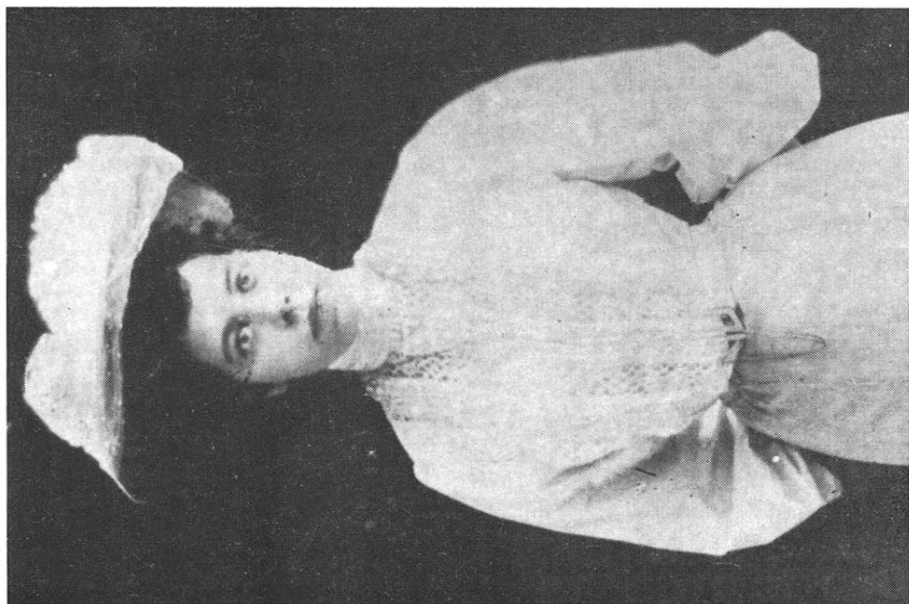


Fig. 28. Nadezhda Lyaschenko, his sister, married to an agronomer (1889-1936).



Fig. 30. Vladimir Tswett, pilot, holder of four St. George Crosses, later professor at the Air Military Academy (1892-1938).



Fig. 29. Vera Brand, his sister, a teacher of foreign languages (1891-1913).





Fig. 31. K. I. Sakodynskii, E. A. Lyaschenko (M. S. Tswett's niece) and V. G. Tswett (M. S. Tswett's distant relative from Chernigov) at the inauguration of the M. S. Tswett commemorative tablet, Leningrad, 1972.

and independence as a scientist, skilfully wielding the scientific methods of research, who has already succeeded in forging a prominent place for himself in science".

B. B. Grinevetsky, a Professor at Novorosiisk University, when considering the applications for the Department of botany in 1916, pointed out, "...in terms of the number of scientific works (55) and their significance, the most worthy applicant is Mikhail Semenovitch Tswett, D.Sc. (Botany), a scholar of European renown, whose investigations on chlorophyll are a matter of pride to Russian science...The University would only be performing its duty to Russian science if it gave such a prominent scholar the opportunity to take a fitting place and continue his scientific activities".

## 6. CONCLUSION

On the initiative of Professor A. Zlatkis, an M. S. Tswett Gold Medal was





Fig. 32. Professor A. Keulemans, making an address at the inauguration of the M. S. Tswett commemorative tablet, Leningrad, 1972.



Fig. 33. Botanical Laboratory of the Academy of Sciences (Vasilievskii ostrov, St. Petersburg), where M. Tswett finished his Magister's Thesis.

instituted for outstanding achievements in the development of chromatography, and this is undoubtedly the highest award for a chromatographer.

The seventy-fifth anniversary of M. S. Tswett's discovery of chromatography was celebrated on a wide scale in 1978. A symposium dedicated to this event was held in the city of Tallin. A very interesting book, edited by L. S. Ettre and A. Zlatkis, devoted to those who developed chromatography was subsequently published<sup>16</sup>. A commemorative medal, conferred upon many scholars and firms, was cast in the U.S.S.R.

In conclusion, it seems appropriate to cite the words of K. V. Chmutov, Chairman of the Scientific Council on Chromatography of the Academy of Sciences.

addressed to those who received that commemorative medal: "The commemorative medal in honour of the seventy-fifth anniversary of M. S. Tswett's discovery of chromatography has been instituted to mark the services of scholars who have concentrated their energy, time and purposeful efforts on developing chromatography itself and using it in solving many of the problems facing mankind. The period of rapid advance in chromatography coincided with the period of intellectual maturity of many of us and was, largely, a result of our active work in developing chromatography. And while the very opportunity to work in such a fine field as chromatography is a major reward for every chromatographer, the U.S.S.R. Scientific Council on Chromatography of the Academy of Sciences, in connection with the seventy-fifth anniversary of the discovery of chromatography, wishes to confer this medal upon those who have made such very important contributions to developing the theory and practice of chromatography. The seventy-fifth anniversary of chromatography in the U.S.S.R. was celebrated on a wide scale and about half of all the commemorative medals were conferred on Soviet scientists and organizations. This does not mean that we claim a corresponding contribution to the development of chromatography.

Chromatography implements an ancient principle — divide and rule. Substances are subjected to division, resulting in man's rule over the elements. Rule in the name of good, for the benefit of mankind. Although it was discovered 75 years ago, chromatography keeps on developing and continues to remain forever young and fruitful."

#### 7. ACKNOWLEDGEMENTS

The author expresses his sincere gratitude to E. A. Lyaschenko (Moscow), I. Hais (Hradec Králové), L. S. Ettre (Norwalk), E. P. Brand (Riga), V. A. Volkov (Moscow), I. V. Mironova (Moscow), L. M. Nikolaeva (Moscow), M. S. Sokolova (Moscow) and M. B. Vetrova (Moscow).

#### 8. SUMMARY

Some new data on the life of M. S. Tswett are given, with excerpts from his letters to Claparede, testimonials of his contemporaries and information about his illness.

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