



Letter to the Editor

The Swiss Canton of Thurgau – not the Kingdom of Bavaria—was the first state to introduce compulsory vaccination against smallpox



In the wake of the COVID-19 pandemic, several countries introduced compulsory vaccination. Even earlier, in the infancy of the vaccination tradition, there used to be instances of compulsory vaccination against smallpox, one of the deadliest known enemies of human health until its utter eradication in 1980.¹

In the scientific literature, the Kingdom of Bavaria (1805–1918) is often reported to have been the first state entity to have introduced compulsory vaccination in 1807.² Nonetheless, it was the Canton of Thurgau (*Kanton Thurgau* or *Thurgovia*, Fig. 1a), in Eastern Switzerland, that first issued such an ordinance in 1806.

At that time, the Canton of Thurgau, one of the original constituents of the *Eidgenossenschaft*, the Old Swiss Confederation (c. 1300–1798), was part of the second Swiss confederation, a client state of France, born out of Napoleon Bonaparte's 1803 *Acte de Médiation* which put an end to the experience of the revolutionary Helvetic Republic (1798–1802) and the first, less universally known Swiss civil war (the *Stecklikrieg*, August–October 1802). Despite orbiting their Napoleonic sun, the re-established Cantons enjoyed a large degree of freedom and could be considered states in their own right—the Canton of Thurgau was no exception. In this atmosphere of legislative autonomy, the cantonal councillor Jakob Christoph Scherb (1736–1811, Fig. 1b), on 29th March 1806, issued a special ordinance imposing the new form of vaccination against smallpox (*Verordnung wegen jährlicher Impfung der Schutzblattern*, Fig. 1c),³ which had started spreading across Europe following the publication of Edward Jenner's 1798 seminal work *An Inquiry into the Causes and Effects of the Variolæ Vaccinæ*, which supplanted the previous, more dangerous Eastern-originated practice of variolation utilising biological material taken from lesions caused the human smallpox virus (instead of its less noxious bovine counterpart).

During the heated social debate on the vaccination campaign in Switzerland (e.g., Wunderlin T. *Tagblatt*, 4th October 2021), the topic was taken up repeatedly by the local media, but it seems to be little known internationally.

In 1806, Scherb took various measures to enforce vaccination. For example, the municipalities had to bear the costs for poor people. If the disease broke out in people who refused vaccination, they were placed under arrest in their house and had to pay for the costs for being guarded.

Interestingly—something that provides contemporary scholarship with a basis for a comparative analysis with current vaccine hesitancy trends and frauds—even back then the cantonal authorities feared forged certifications, hence in the ordinance it was stated that:

Therefore, neither midwives nor anyone other than doctors recognised by us may undertake this vaccination, unless it is done under the supervision of a doctor, and if the inoculated persons receive the certificate required in the previous [Es dürfen daher weder Hebammen noch irgendjemand anderes, als von uns anerkannte Aerzte diese Impfung unternehmen, ausser wenn es unter der Aufsicht eines Arztes geschieht, und wenn die Eingepfropften das im vorigen § geforderte Zeugnis erhalten].³

Scherb, the son of a physician, studied medicine in several European cities and obtained his medical doctorate in Montpellier. Later, he distinguished himself as a staunch advocate of immunisation against smallpox—at the time still in the form of variolation—a position that he summarised in his 1779 work on the inoculation of smallpox, *Über die Einpfopfung der Pocken*. Scherb's introduction of compulsory vaccination was motivated by his will to preserve human health and the realisation of the imminent danger represented by smallpox.⁴ His attempts were corroborated by the strong appreciation of the new Jennerian vaccination that arose in the European society in the first decade of the 19th century and by a special admirer of that English physician, the Emperor Bonaparte himself.⁵

In conclusion, on account of his pioneering legislative action and promotion of a new form of state-coordinated fight against infectious diseases, J.C. Scherb's name should become more known in the international historico-medical reconstruction of the path towards the eradication of smallpox. Similarly, the Canton of Thurgau should also be considered the first state or state-like institution to have made vaccination compulsory.

However, Scherb's choice to introduce a form of prevention based on coercion has still remained a controversial point even in our contemporary societies, proving how public health issues that appear absolutely new are in fact rooted in an old type of opposition to vaccination and the eternal debate between the patient's freedom of choice and the state's commitment to preserve health at a population level.

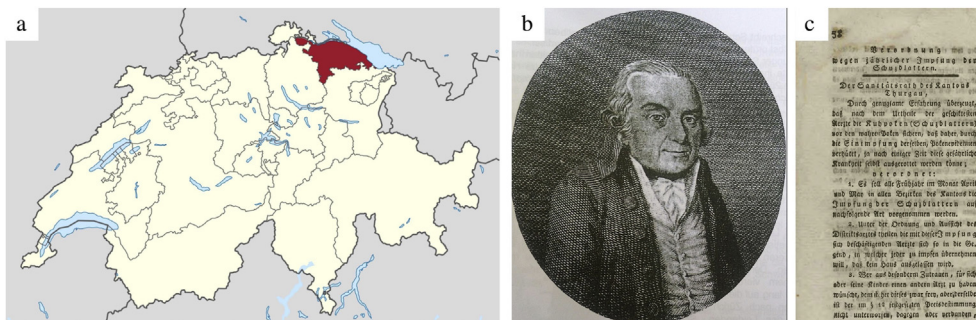


Fig. 1. a. Map of the Canton Thurgau, indicating its location in Eastern Switzerland, bordering with Germany—from Wikimedia Commons, image in the public domain. b. Jakob Christoph Scherb (1736–1811). Image from the website *Historisches Familienlexikon der Schweiz*, online at: http://www.hfls.ch/humo-gen/family.php?id=F8479&main_person=I28289 (last accessed on 2nd January 2022). Reproduced with permission. c. The first page of the *Verordnung* issued by the *Sanitätsrath des Kantons Thurgau* on 29th March 1806. A digitised version of the original is available at: <https://sandbox.zenodo.org/record/907336#YdDk-RPMKgS> (last accessed on 2nd January 2022).

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