

**Zeitschrift:** The Swiss observer : the journal of the Federation of Swiss Societies in the UK

**Herausgeber:** Federation of Swiss Societies in the United Kingdom

**Band:** - (1968)

**Heft:** 1545

**Artikel:** Swiss atomic clocks throughout the world

**Autor:** [s.n.]

**DOI:** <https://doi.org/10.5169/seals-692345>

#### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

#### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

#### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 03.02.2026

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

identities to be kept to just a few employees of the bank, and is thus merely a technical measure to reduce the danger of indiscretion.

"It is often thought abroad that the duty of a Swiss banker to preserve secrecy is absolute, but this is, of course, quite wrong. In all cases where it is in the public interest to sacrifice banking secrecy, the banker is bound to give information. Such a situation could arise in civil law cases concerning for example wills, the prosecution of debts, bankruptcies, etc. But it is in criminal cases and tax offences where the limits of banking secrecy are most called in question. As far as criminal law is concerned, the obligation of a banker to testify usually takes precedence over his duty to preserve secrecy. This obligation, however, is limited in various respects. It is confined to cases brought before an independent judicial authority which constitute offences under Swiss penal law and does not go beyond matters directly concerning the accused. The obligation of a banker to give evidence also applies to requests of other countries with which Switzerland has an agreement to give assistance in legal cases, provided a Swiss court of justice rules the offence concerned to be also a punishable offence according to Swiss law. It is most of all in tax cases that attention is focussed on Swiss banking secrecy. Swiss tax laws recognise the duty of a banker to preserve secrecy, since the view is taken in Switzerland that it is the responsibility of the individual to make his own tax return to the authorities and that third parties should not be brought into the matter. The tax-payer himself must obtain the necessary documentary evidence of his income, such as a salary declaration from his employer or a list of his security holdings from his bank. Switzerland adopts a corresponding attitude towards foreign tax authorities, since it is obvious that information which is withheld from Swiss authorities is not going to be revealed to foreigners.

## SWISS ATOMIC CLOCKS THROUGHOUT THE WORLD

The Swiss watch factory of Patek, Philippe recently installed, on the façade of its premises in Geneva, a clock whose timing is more accurate than the rotation of the earth even. In fact, the daily period of rotation of the earth may vary by a hundredth of a second, while the new Patek, Philippe clock — which contains about 100 transistors and diodes and is controlled by the atomic master clock at Neuchâtel Observatory — has a precision that is higher still. It is more precise than all previous clocks made by this firm, i.e., in particular, the one that was used at the Swiss National Exhibition in Lausanne in 1964, the one at the New York World's Fair, and the one installed in the Timekeeping Centre of the Swiss Pavilion in Montreal, which set the time for all the official clocks at that exhibition. In addition, it is even more precise than the timing system supplied to Radio Vatican in the summer of 1967, which comprises over 1,000 diodes and transistors. The Vatican timekeeping centre consists of two master clocks permanently checked by a system of mutual supervision and containing two quartz oscillators kept at a constant temperature of 50°C, guaranteeing accuracy of timing as great as one thousandth of a second per day. The master-clock system controls the timing of several hundreds of secondary clocks (max. 1,000), timing switches, signalling clocks, and broadcasting of radio time signals, etc.

[O.S.E.C.]

"Admittedly, the legal force given to banking secrecy has contributed to the importance of Switzerland as an international financial centre. But this development would not have been possible without a number of other prerequisites, among which, in particular, is the stability of Switzerland's political, economic and social conditions. Although the Swiss franc has not been spared to a certain extent the general depreciation in the value of money, the high gold reserves of 12 billion francs held by the Swiss National Bank and the fact that notes in circulation are backed by a gold cover of about 120% gives solidity to Swiss national currency. The rise of Switzerland as an international financial centre has also been helped by the lack of any restrictions on the movement of capital. Finally, there is a highly developed banking system, and Swiss banks in general have a very good name. It is clear from what has been said that banking secrecy is only one of many factors which have enabled Switzerland to reach her present-day position as a financial centre."

The speaker hoped his brief remarks had made it plain that the institution of banking secrecy in Switzerland stemmed from the attitude of the individual towards the State. "The protection of private property and personal rights is one of the cornerstones of the Swiss constitution, but it can only be achieved through discretion and this is where banking secrecy is so important. There may well be isolated instances where it has served to cover up some fishy deal or other, but responsible Swiss banks do not touch that sort of business, and such mischances as do occur are no reason to sacrifice the principle of banking secrecy.

"Just as with other laws, the banker must, within the limits set by legislation, decide for himself what is admissible and what is inadmissible in matters of banking secrecy. You may rest assured that the Swiss banks are well aware that honesty is the best policy."

## THE QUARTZ WRIST-WATCH

The Electronic Watchmaking Centre Co. Ltd. (EWC), a collective research organization set up by the Swiss watchmaking industry, has just presented its first quartz wrist-watch, the fruit of six years' research. This remarkable step forward has been achieved by combining a quartz suitably sized for watchmaking with miniaturised circuits. The quartz crystal which, in this watch, replaces the classical regulating organ, is — next to the atomic clock — the most precise time standard in existence. EWC's research workers had to produce specially for the purpose a number of miniaturised integrated circuits satisfying the exacting demands of the watchmaking industry, viz., very low consumption of electricity and small dimensions. The great achievement of EWC's research workers lies in the fact that they succeeded in scaling down to wrist-watch size a timekeeping appliance whose principles have been known for a long time but whose size prevented it from being worn. At Neuchâtel Observatory's 102nd Timekeeping Competition in 1967, the results of which were announced at the beginning of 1968, EWC quartz wrist-watches were twelve times as accurate as the best chronometers of traditional design. The first ten places were all won by ten watches presented by EWC, the eleventh being taken by a watch of the same type presented by a Japanese manufacturer. The Swiss watchmaking industry has thus shown that it is now capable not only of mastering the problems of precision and miniaturisation in a mechanical watch, but also of overcoming the same difficulties in the electronic field.

[O.S.E.C.]