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# The Swiss Observer

FOUNDED BY MR. P. P. BOEHRINGER.

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## HOME NEWS

### ZURICH.

A well-known figure in the Swiss silk industry has disappeared by the death of Mr. Alfred Rütschi. He died in Munich from appendicitis. N.Z.Z.

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A novel bill was before the Zurich electorate last Sunday, and we await the detailed results of the popular vote with interest. It is proposed to alleviate, through the medium of cantonal finances, the crushing tax burden resting on 104 communities, whose circumstances are so strained that they have to levy 200%, and more, communal tax. This new measure is calculated to bring reductions of from 1% to 110% by the beginning of next year. State help seems indicated, as it is said that these unfortunate circumstances are not the result of mis-management, but of fulfilling legal obligations decreed by the State. Economists realise that too heavy a burden cannot be borne indefinitely without jeopardising all hopes of recovery. It is hoped that reduced rates of taxation will in some communities at least encourage the establishment of industrial and commercial undertakings, which will ultimately enable financial matters to be put again on a rational and stable basis. At the same time, it should prevent further reductions in communal income by obviating the removal of capital and industry to other, less burdened, places. The total cost to the State is estimated to be about Frs. 400,000.

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According to a Reuter telegram from Berne, Captain Instructor Lucius Baertsch was making a flight at the Dübendorf aerodrome with a civil aviation pupil, named Richard Trever Nunn, an engineer employed by the Brown Boveri Company, when he crashed from a height of about a hundred feet. Both men are lying seriously injured at the Cantonal Hospital in Zurich.

### BASEL.

The Basle parish of St. Peter heard last Sunday the last sermon by Pastor Preiswerk, who is retiring after 40 years' untiring work. Not one seat remained vacant in the church, so great was the parish's desire to show appreciation to a man who has endeared himself to all. N.W.

### SWISS CINEMA SCOLAIRE REBUILDS AFTER FIRE.

The Co-operative Society "Cinema-scolaire et populaire Suisse," whose collection of films was destroyed by fire last January, has decided to reorganise its services and to reconstruct the material upon a more solid foundation than formerly. A subscription to which the public has generously responded has permitted the buying of several films, projection apparatus, and the material necessary for the making of films.

Lectures will again be organised this winter in the various towns and schools of the Confederation. Among the films already acquired are "Chang," "The Nibelungen," "Petroneila," a Swiss film taken in the Val d'Arolla, "The Master of the House," by Carl Dreyer, and a series of instructive and documentary films for schools.

An office has been opened at Saint-Blaise, Neuchâtel, and at the National Exhibition held at Lausanne during September the general secretary of the society showed a series of industrial and agricultural films which have recently been made by the society's operators.

### FROZEN TO DEATH.

A 25-year-old student of the Polytechnic school at Prague, named Krieger, who set out alone from the Jungfrau-Joch, the saddle between the Jungfrau and the Monch, to climb to one of the highest mountain-huts, was later found dead at the door of a cabin on the way.

According to a note found in the cabin, Reuter states, he had fallen while climbing and injured his skull. On leaving the cabin where he had taken shelter he must have fainted and was frozen to death.

## SWISS POWER ENGINES.

The fact that the Swiss motor engine industry can hold its own all the world over proves that the products of this branch have attained a high degree of perfection. Let us give as examples that the first hydraulic turbines used at the Niagara Falls were of Swiss manufacture, that the most powerful steam turbine in the world, producing 225,000 h.p. and used in New York, was delivered by a Swiss firm and that Swiss oil engines are used in all countries and drive boats on all seas.

The manufacture of steam engines has acquired great renown: many of these engines work electric generators in India, in the Argentine Republic and in Sweden; others work pumps on the Nile. However, the construction of steam engines has gone down somewhat during the last 25 years. Steam engines for the purpose of locomotion, have been replaced more and more by steam turbines and Diesel engines. In special cases, as for instance for navigation on rivers and lakes, they are still used and the Swiss firms of Sulzer Brothers, Ltd. at Winterthur and Escher-Wyss at Zurich furnish them to foreign customers.

As early as 1893, when the oil engine was still at an experimental stage, the firm of Sulzer Brothers of Winterthur took out a licence for a patent to construct it and some years later presented the first one on the market. No one at that time had any idea of the future that was before the oil engine, before and after the war, when some improvements had been made in its construction.

The Swiss Locomotive and Machine Works in Winterthur also undertook later on the making of these engines, but did not produce such powerful machines as the Sulzer ones. The small oil engine is now made in Switzerland by a number of firms. Thanks to its economical use of fuel and its almost immediate start, the oil engine finds a wide field as a motor for electric generators. If there is no electric power on hand, or it is too costly, the oil engine is the best for working pumps and agricultural and industrial machines.

The Sulzer firm has given a great extension to its construction of engines for boats and has already sold a great number of engines producing 6,800 h.p. each. Boats having these engines ply regularly between Amsterdam and Batavia; a single fill of the oil reservoir is required for both the outward and return journey. The oil engines delivered by the Swiss industry up till now are capable of producing about 4 million h.p.

However strange it may seem, Switzerland, which has no coal-mines, has become one of the pioneers in the construction of steam turbines. In 1901, the first European firm to undertake the manufacture of steam turbines was a Swiss one (*Brown Boveri & Co., Baden*). The same firm, a quarter of a century later, delivered the most powerful one known to this day. At the end of the year 1928, the turbines delivered by B. B. & Co., or in hand at its works amounted, taken altogether, to 20 million h.p. The steam turbines constructed by Escher-Wyss in Zurich and the *Ateliers de Construction Oerlikon* have also acquired a world wide renown. The steam turbines made in Switzerland up to now are capable of producing 30 million h.p. This is an extraordinary success when one thinks that Switzerland herself uses none of these steam turbines, all those she builds being sent to foreign countries.

Most of them are used in electric works as motor engines. The working of compressors and pumps by steam turbines has developed greatly, but in order to make an economical use of these turbines, it is desirable that the pumps and compressors be of a special type to allow of coupling them directly to the high-speed turbines (3,000 turns and more a minute). The Swiss steam-turbine industry equips big liners; it builds a special kind of turbine for those worked by a screw.

It is surprising that Switzerland, a small State, without a sea-port and without a powerful diplomatic service, should have been able to acquire universal renown for its motor engine industry. It is because the Swiss engines are so well built and the work carried on in such a very rational way that this success has been possible. Swiss manufacturers have realised that success in export trade depends essentially on these two points: They will continue to improve them in order to maintain and develop their trade.

S.I.T.

## THE ECONOMIC IMPORTANCE OF SWITZERLAND.

The London "Economist" has published the following account of the relatively important rôle Switzerland plays in world economics.

According to the estimates of the Federal Bureau of Statistics, the population of Switzerland has now exceeded four millions, whereas it was 2,392,000 in 1850, 3,315,000 in 1900 and 3,880,000 in 1920. There are now 30 towns with a population of over 10,000 inhabitants, as against 26 in 1920, and the general increase in towns and urban districts represents 44 per cent of the total increase. On the other hand, there is a continuous reduction in the number of inhabitants of the mountain regions above a level of 2,100 feet, which have lost 20,000 inhabitants during the past 70 years. The Federal Government is now examining means of helping the mountain populations and of preventing them from emigrating to the towns or abroad. These four million inhabitants live on a territory of 15,977 square miles, of which 22.55 per cent is wholly unproductive, as it consists of rocks, eternal snows, glaciers and lakes.

Switzerland, despite the smallness of her territory and her lack of raw materials, is an industrial country, and her inhabitants specialise in finishing industries which require the highest quality of labour, and for which export is a vital necessity. Of the total population, 635,000 persons are workers and artisans, 484,000 are agriculturists, 182,000 employees of commercial undertakings; 264,000 persons are independently employed; 166,000 are servants or employed in the hotel industry; and 137,000 follow unspecified occupations.

The importance of Switzerland in world trade is often ignored or overlooked, even by the Swiss themselves; it is not insignificant in comparison with her area and population. The area of Switzerland is 15,977 square miles, while the area of the world is about 196,550,000 square miles; the population of Switzerland is four millions, while that of the world is nearly 1,927 millions. Owing to the prosperous condition of her industries and to the wealth of her inhabitants, as well as to the facilities she presents for travelling, Switzerland forms an import market, the importance of which is often underrated. Switzerland's annual purchases in other countries are very considerable; they reached a total of £109,800,000 in 1928, or about £27 per head of population. This is not only due to the power of absorption of the Swiss market on account of the advanced stage of the national economy, but also to the fact that Switzerland offers very liberal treatment as regards customs duties to the various foreign goods imported by her.

Switzerland's annual imports represent 1.46 per cent of the world's imports, more than those of Czechoslovakia, Spain, Sweden, Brazil, Poland and Roumania, whose population is much greater. Switzerland has a great purchasing power, a fact which should be of some interest to British exporters. Imports from Great Britain totalled £11,118,000 in 1925, they fell to £5,921,000 in 1926, and then rose to £7,572,000 in 1927 and £9,055,000 in 1928. They show a slight increase during the present year, but they might be much higher, as British goods have always been popular with the Swiss people. This decrease in British imports to Switzerland may be ascribed on the one hand to German competition, on the other hand to the lack of interest British industrialists generally show in the Swiss market, where they advertise very little and send only a few commercial agents. An effort on their part might bring about a notable increase in British imports into Switzerland.

## THINNEST WATCH IN EUROPE.

The Hon. Ivor Guest, Lord Wimborne's heir, has the thinnest watch in Europe. It was made specially for him in Switzerland at a cost of about £120. It is encased delicately in platinum. Five slots pierce the case, within which time revolves so ingeniously that the correct hour, minute, second, date and month may be ascertained instantly by glancing at their respective apertures.