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## SWITZERLAND'S SERIOUS FINANCIAL POSITION.

By Dr. H. Büchi (*Translation*)

It is astonishing what a small part financial problems play in war-time public discussions. One reads about military, economic, spiritual and lately even about psychological defence. Is this a good or a bad sign? It seems permissible to draw the conclusion that the general confidence in the country's government, with regard hereto, is so great that discussions on this question seem superfluous. Or is there a certain ostrich-like attitude in face of the sinister figures of finance which since the outbreak of war characterize the published budgets. Are we concerned here with anxieties which people believe can and must be deferred in view of the more burning questions of the day?

It would not be easy to give the correct answers to these queries. What is more certain is that the Swiss public occasionally only takes notice of the financial situation and prospects when these come under an especially strong light. This is the case at the present moment and in two ways: in the appearance of the Federal budget for the year 1942 and the coming into force of the purchase tax since October 1st.

The Federal budget for 1942 may certainly occasion alarm on account of the figures given, yet more so because of what is not given. At first glance the budget might have a soothing effect on seeing that the appeal made a long time ago to economize and to reduce the figures on both sides of the account has evidently been heeded. Thus, comparable with the 528.5 million francs expenditure and the 444.9 million revenue for 1941 we now find 479.7 and 371 millions respectively. Reflections arise when the record deficit of nearly 109 million francs is realized, a considerably higher amount than the 84 millions computed in the 1941 estimate. More bewildering is the admission that this huge deficit is attributable less to an increase in expenditure — which in view of the many unavoidable war-time allocations and subsidies could hardly suffer a notable reduction — than to the anticipated decline in the most important sources of revenue above all in the customs receipts which form the backbone of the fiscal policy of the Confederation.

These figures represent the debit and credit items only within the ordinary or normal framework of our administration; side by side with this "household account" are the extraordinary expenses imposing a somewhat alarming contemplation. The total of this extraordinary expenditure (credits for the up-keep of the army, national defence, war establishment, provision of work, etc.) amounts to 1,340 million francs gross or 1,010 million nett if the expected revenue from defence contributions, war profit tax, purchase tax, etc., is deducted. This of course, presupposes that the present strength of mobilization is maintained throughout the year.

In order to illustrate and stress the need for the strictest economy and restraint a statement is issued showing the heavy obligations contracted by the Confederation. By the end of 1942 we shall have spent for defence and active service 4,631 million francs. The ordinary indebtedness is 1,539 million and when the total war expenditure to end 1942 (3,101 million) is added the total debts of the Confederation reach something like 4,640 million francs and this does not in-

clude about 3,000 million owing by the Federal Railways. To complete the picture the steadily increasing indebtedness of the cantons, towns and communes cannot be left out of the reckoning.

In view of the seriousness of the situation an early abatement may be expected of the storm which has been raised by the socialists about the purchase or turn-over tax. This unpopular and unheard-of levy has come into force at a time when the minds were already agitated and perturbed over the steady rise in prices. The turn-over tax by which primarily 3% are charged to the wholesaler is expected to increase retail prices by 2% only. The proceeds of the tax are earmarked to gradually write off the extra-ordinary war expenses for which latter purpose the military exemption duty (Militärsteuer) has already been doubled and a higher rate of the war profits tax is still under consideration. Wealth and higher income have so far carried and brunt of the taxation but the purchase tax distributes the burden evenly the more so as vital articles of daily requirements (bread, milk, cheese, butter, etc.) are exempted. Switzerland is the last country which has enacted this tax; it is calculated at an exceedingly low rate and its collection requires no complicated administrative machinery. In spite of protests the Federal Council can hardly contemplate dropping this tax as the redemption of the extraordinary expenditure will necessitate a prolonged amortization period, moreover fresh war expenditure during the coming year may call for further financial measures.

## THE BICENTENARY OF DANIEL JEANRICHARD.

(*"Swiss Industry and Trade,"* August-Sept. 1941.)

During the beautiful mid-summer days of June, the Jura region and the town of Le Locle celebrated the bicentenary of the death in 1741 of Daniel Jeanrichard, founder of the Swiss watch industry.

Jeanrichard was a creator and a pioneer, who never dreamed of the historical and economic consequences of his work. How surprised he would be — even though during his life he was never apt to be surprised at anything — if he could return to earth now, in 1941, and see the technical perfection and elegance of the Swiss-made watch, the great factories which have been built in the places he knew and where he founded his small family workshop. How he would rejoice to know the reputation and ever-growing importance of Swiss watches on world markets.

Daniel Jeanrichard was a creator... a pioneer...

His story which is also that of the origin of Swiss watchcraft, is well-known; a portrait by the Swiss painter Bachelin, recalls him constantly to our memory, and a monument commemorating his work has been raised in Le Locle, centre of the industry he founded.

It is true that in the second half of the XVIIth century, watches were already being manufactured in various parts of Europe: at Blois in France, in Southern Germany. But, together with Peter Henlein, Daniel Jeanrichard's chief merit lies in having made of the watch an object of universal utility, in vulgarizing its use. In the middle of the XVIIth century, the population of the Jura region — soon to become a population of watch craftsmen thanks to Jeanrichard — consisted of small land owners living on the produce

of their poor soil; they produced their own milk, cheese and vegetables and a little meat from home-raised cattle. The children were taught various trades — especially that of locksmith — which might supplement the family income.

It was probably in 1679 that a merchant who had bought a watch in London, brought the precious object to be repaired to the modest locksmith's workshop where young Daniel worked with his father. While talking with the father, the customer noticed a few pieces of the son's work and thereby had enough faith in his skill to entrust him with the repair of the watch — which was of course nothing to compare with the modern Swiss chronometer. Young Daniel set to work to create a second watch like the first; to do this, he had first to invent and make the necessary tools, the watch-case, springs and the whole movement — and his father's modest workshop did not offer many resources. However, thanks to his inventive genius and obstinate perseverance, he succeeded in creating the marvel after a year's patient toil.

Early in the XVIIIth century, Daniel Jeanrichard moved near the town of Le Locle, where can still be seen the low, rambling house where he and his family lived. His work roused great interest among the population of neighbouring towns and villages — La Sagne, Le Locle and La Chaux-de-Fonds — a region where poverty and large families were rife. At Jeanrichard's death in 1741 there were already several hundred watchmakers in the valley of Le Locle and La Chaux-de-Fonds. Fifteen years later they were producing between them over 15,000 gold and silver watches, together with a great number of both simple and complicated clocks. In the space of two generations, the rise of the watch industry was remarkable. So remarkable that in 1765 a collaborator of the famous Encyclopedists in France was able to write: "Who would think to find in such a country an abundance of genius, industry, polite and civilized customs and manners; to see that science is honoured there, as are also useful and agreeable arts which are cultivated with great success by a large population."

The outcome of Jeanrichard's initiative is known to everyone, but best of all to watch importers and the innumerable lovers of Swiss watches throughout the world. Export figures which are counted in millions and a sound reputation prove the worth of this great industry of a small state.

Like all pioneers and creators, Daniel Jeanrichard had many times to fight against weariness and discouragement. Armed only with his genius and his will, his only hope was to attain success and his success remained hypothetical until the very hour of triumph. In a commemoration edition of *La Feuille d'Avis des Montagnes* (a newspaper of the watchmaking region of Le Locle) Mr. Rochat-Cenise described Daniel Jeanrichard and his kind with rough but apt eloquence as "splendid fellows." They were the men who founded nations, or laid the foundations of great industries; they were builders as were the hewers of stones and the carpenters who built cathedrals. As Ibsen said, they were "the architects of the high tower which dominates the waters." They deserve our love and hommage and to live long in our memory.

That is why the commemoration of the bicentenary of Daniel Jeanrichard is for Le Locle and all other centres of the Swiss watch industry, an act of faith and hope.

J. D.-F.

## REPLACING FUELS IN SWITZERLAND.

Before the war, there were 125,000 motor vehicles in Switzerland, a country of 4 million inhabitants. These figures represent one motor vehicle to every 30 inhabitants. The majority of these vehicles were of course private cars, mostly large-powered, better fitted to the mountainous land than smaller models.

Even though this army of cars has to-day almost entirely vanished from the roads of Switzerland, it nevertheless still exists, hidden away in garages, awaiting the coming of better days.

But as "better days" are long in coming, Switzerland had to adapt itself, already last year, to find replacement fuels. Fortunately, this is the country of chemists, engineers and technicians, who courageously set to work on this new task. They have at their disposal various raw materials which had until now been despised, but which to-day prove to be of major importance.

The Swiss thought first of wood-gas as a replacement fuel. The country is thickly wooded and the process of extracting gas from wood or charcoal has been known for a long time. It was only necessary to perfect the process and to produce charcoal in sufficient quantities to feed some thousands of cars and trucks. This was done, and to-day about 2,000 motor vehicles run on wood-gas, are operating on Swiss roads.

This is not sufficient, however. For wood-gas is poor in quality and not all cars run on this fuel can furnish the power required of them on mountain roads. Moreover, 130,000 tons of wood, cut into small logs or in the form of charcoal, would be needed annually to furnish a sufficient amount of this fuel, and other industries — the paper industry, for instance — would be deprived of an essential raw material.

Another method had to be found to overcome these difficulties. Switzerland has unlimited resources of limestone, and also produces 7½ milliard kW/hour of electricity annually. By distilling limestone, calcium carbide can be cheaply obtained. Carbide, which can easily be contained in small tanks deposited at the back of cars, gives off acetylene gas when in contact with water. And acetylene gas is an excellent fuel for private automobiles. Switzerland hopes soon to produce 15,000 tons of carbide per annum: and 2,000 more cars will be on the road again.

But even this is not sufficient. Swiss chemists have established plans for the manufacture of 30,000 tons of paraldehyde, a liquid fuel, which is already being mixed with gasoline in the amount of about 30%. Paraldehyde has the advantage of not requiring any transformation of the motor in which it is to be used. Plans are also being studied for the mass production of a mixture of alcohol and ketones by the destructive distillation of wood, and a big plant will shortly be erected for this purpose in the Canton of Grisons.

Finally, mention must also be made of the experiments made in the construction of electrically-driven vehicles, equipped with light but powerful accumulators. An inventor in Berne is said to have solved this problem recently, and it is expected that his discovery will soon be made public.

Thus it is evident that Switzerland is not being left behind in this matter. Until last year this country profited by experiences made abroad; to-day, in view of present circumstances, rapid progress is being made in regard to replacing fuels.

S.I.T.