

**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:** - (1931)  
**Heft:** 497  
  
**Artikel:** The laboratory car of the Swiss Federal Railways  
**Autor:** Eales, E.  
**DOI:** <https://doi.org/10.5169/seals-690949>

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**Download PDF:** 12.05.2025

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## THE LABORATORY CAR OF THE SWISS FEDERAL RAILWAYS.

In these days when the electrification of railways is a current topic of interest, a certain modest car on the Swiss Federal Railways is likely to attract the attention of engineers from other countries. There is nothing much outside to distinguish it from the other cars, except that it carries the mark "X4d" on the under chassis and it has in front a sort of raised cabin with glass front and sides. This cabin makes one think of a Canadian observation car, and no doubt ordinary travellers in Switzerland would gladly pay a supplement to be allowed to take a seat in the "X4d," so as to be able to look over the engine and see the view in front as well as to the right and left.

But no ordinary traveller is allowed to enter this "wagon dynamométrique" as it is called, for it is a kind of laboratory reserved for the engineers and electricians of the C.F.F., and is in no way fitted up for the profane. A number of special testing instruments are placed on board this car, toothed gear wheels, metal arms, levers, globes and recording pens, all lifeless as long as the train is stationary, but springing into activity directly the engine (which immediately precedes ("X4d")) shows sign of movement. First the line-indicator, set going by the regular motion, traces in a series of small dots, the curves of the railway line on a wide tape. Three indicators give an account of the speed, and when first Swiss railways were electrified the speedometer rarely marked more than 30 km., but now the meter runs up to 80 km. and not an engineer winks an eyelash, for even beyond that rate, he knows there is not the least danger for the passengers behind his observation car. One of the graphics gives the diagram of the hydraulic meter for the traction force, and indicates in kilograms the force exerted on the couplings between the tractor and the train. At the start the curve rises abruptly, then when once the train is in full swing, it traces long regular waves, now and again interrupted by sudden jumps up and down, according as to whether the rhythm is even or no. Beside it is the ergometer registering the mechanical energy necessary to overcome the inertia inherent in the train, after deduction has been made of atmospheric resistance and friction. This mechanical energy depends on two factors, i.e., the force necessary to accelerate or diminish the train's speed, and the energy wanted to overcome a difference of level if the line is downhill. So the ergometer has its work cut out for it.

Swiss engineers too, have found out how to control automatically the state of the permanent way; directly the regularity of the train's march is interrupted by the slightest jerk, either between wheels and rails, or caused by the slight differences of level, a possible widening of lines, rise or fall in ballast, the tell-tale graphic in the car records the fact, whilst just as the brakes come into play to bring the train to a full stop, before even the instruments have ceased their automatic records, a special apparatus comes into action and registers the force shown by the braking, and the way in which the brakes have acted. ?

Other apparatus show to what degree the current is recuperated on down grade, temperature rises and so on.

No new tractor is allowed to take up service until it has made satisfactory trips in front of the laboratory car, and until the instruments in the latter have each and all given a clean bill of health to the new-comer. Then, and not till then, may it take up its service on the Swiss Federal Railways.

E. Eales, Veevey

In Electrical Times, April number.

## SWISS COLONY DANCE.

The Helvetic Society, the Swiss organisation in Dublin, had their annual dance at the Dolphin Hotel on the 13th inst. There was an atmosphere of Continental gaiety about the reunion, and, it is hardly necessary to say, a tempting supper was served. The ballroom was beautifully decorated with the Saorstat and Swiss national flags.

Amongst those present were:—Mr. and Mrs. O. Wuest, Mr. and Mrs. E. Hess, Mr. and Mrs. E. Gygax, Mr. and Mrs. C. Offermann, Mr. and Mrs. P. Hitz, Mr. and Mrs. C. Baumann, Mr. and Mrs. E. Chamartin, Mr. and Mrs. F. Waldmeier, H. Margey, W. P. Neate, T. Murphy, K. J. Kenny, D. J. Bergin, solr.; S. T. Kenny.

## 1st OF AUGUST CELEBRATION.

At a recent meeting of the General Committee of the Swiss Colony, held under the chairmanship of the Swiss Minister, it has been decided that no official celebration of the Swiss national festival shall take place in London this year on the 1st of August. While regretting the negative decision, passed after careful consideration, the Committee has come to the conclusion that for various weighty reasons the circumstances make it necessary to take this course, which, however, as has been emphasized at the meeting, shall create no precedent for coming years. The subject will be dealt with anew at a meeting of the Committee in January 1932, with a view to make proper arrangements for that year's celebration.

## Concert classique à l'Eglise Suisse.

Tous les amateurs de bonne musique dans notre Colonie seront heureux d'apprendre que Melle Sophie Wyss s'est très aimablement offerte à donner un concert de musique classique à l'Eglise Suisse le 14 de ce mois, avec le concours de M. Franz Walter, le distingué violoncelliste genevois, et Mr. Spencer Shaw, organiste au Central Hall, Westminster.

Le programme comporte des oeuvres de Bach, César Franck, Mozart, Max Reger, etc. C'est la garantie d'un vrai régal musical, puisqu'elles seront interprétées par de tels artistes.

Ce sera pour beaucoup une occasion d'entendre pour la première fois les magnifiques orgues de l'église de notre Colonie, auxquelles Mr. Shaw saura faire rendre leur plein. L'excellente acoustique du bâtiment leur est d'ailleurs éminemment favorable.

Pour conserver à ce concert son cachet de célébration de l'Ascension, il ne sera vendu ni billet ni programme; une "silver collection" sera faite à l'issue pour couvrir les frais. Tout surplus ira au Fonds de réparation de l'église.

## CHIACCHIERATA ALLA RINFUSA.

Mi salta il grillo questa volta di paragonarmi nientemeno che ad un lavoro di Pirandello: "Sei personaggi in cerca di autore" con la differenza che io sono un personaggio (anche se minimo!) in cerca di soggetto—un soggetto che sia degno di essere impastato e cucinato per poi venir servito ai cortesi lettori dello "Swiss Observer" e che possa essere da questi digerito facilmente senza bisogno di una tazza di forte caffè nero o anche, se capita, di una dose di bicarbonato—vorrei presentarvi un piattino, così alla buona, che senza avere le pretese d'un manicaretto sia gustato un tantino ... Ma dove trovarlo?

Era mia intenzione, assicuro, di recarmi a Locarno la scorsa domenica ed assistere all'annuale caratteristica primaverile festa delle cameli che la graziosa regina del Verbano aveva preparato con tanta cura ed ardore, però, dimostrando di essere veramente saggia (e come non lo sarebbe dato che vide la Conferenza della pace?) si era assicurata anche contro il maltempo e... non sbagliò. La scappigliata primavera, spensierata, come lo sono del resto tutte le creature giovani e leggiadre, prese a quanto pare un gusto matto di fare il guasta—feste—e dopo un susseguirsi di giornate tepide e olezzanti, ecco che proprio sabato—primo giorno della festa—il cielo apparve imbronciato mica male e prometteva nulla di buono e... giu acqua, e tira vento e i locarnesi a scrutare tutti gli oracoli—che si deve fare?—Un tantin di sole fece capolino, maliziosamente, nel pomeriggio quindi avanti! e la festa si tenne ugualmente ma certo ridotta ai minimi termini, con poco concorso di gente e anche quel poco era di cattivo umore e dardellava dal frescolino (chiamarlo freddo, in primavera, sarebbe più esatto, ma lasciamo andare...) Una consolazione per Locarno la diedero le Assicurazioni—il cielo fece almeno un po' del suo dovere e mandò giù il previsto 2 mm. di acqua così che si verso una quindicina di mille franchetti ai desolati locarnesi i quali decisero di ripetere lo spettacolo domenica prossima, allora... allora ci andrò anch'io e così potrò fare quattro parole, così alla buona, come in famiglia, dalle cortesi colonne di questo simpatico periodico, e raccontare un po' cosa si fece, saranno tutte cose belle perché sia per lo spettacolo che si tiene in Piazza Grande, (innanzi ai caratteristici portici locarnesi) a soggetto prettamente nostrano, musicato da uno dei migliori musicisti, sia per la sfilata dei carri simbolici, sfoggianti una copiosa profusione di splendidi fiori, la festa delle Cameli (festa della neve, si potrebbe denominare quella di questo anno, perché anche neve venne giù domenica scorsa!) riesce sempre con grande successo.

E ieri sera a Bellinzona si tenne il primo concerto della stagioni dalla musica cittadina la quale durante la primavera e l'estate dà ogni tanto un concerto in una delle Piazze della Turrita, alla sera, e gli amanti della musica ascoltano così in piedi, o seduti a un tavolino d'un circostante "caffè" (o ristorante che dir si voglia) quelle battute armoniose—ma, anche qui, messer lo Tempo ci mette quasi sempre lo zampino... e quasi sempre un po' di pioggia ci viene a spandere le note musicali e la gente... è tradizionale, ormai che quando a Bellinzona si tiene un concerto piove o quasi:—Il motivo? O che il tempo è stanco di ascoltare musica, o che i musicisti... ah no! questo proprio no! i musicisti non c'entrano, sono provetti sotto ogni riguardo e meritano una lode speciale, anche perché a volte, sfidano l'acqua e suonano lo stesso!

Ed ora, lettore, ti occorre un forte caffè per digerire tutta questa roba? o forse una tazza di thè, dato che ti trovi in Inghilterra?

Elena Lunghi.

## THE CHARM OF SWITZERLAND.

The mention of Switzerland at once calls up delightful anticipations or memories. From our experience there is hardly anyone who does not look forward to visiting the country sooner or later in fulfilment of a long cherished ambition, while those returning to it for a second time are a little perplexed by the conflicting claims of districts they already know and love, and others which have been described to them by equally enthusiastic friends.

Fortunately, people who have spent two or more holidays in different districts will nearly always stoutly maintain that the place they went to first—whichever it may be—is of all others the most delightful and satisfactory, and this is perhaps the most convincing testimony to the wonderful charm of the whole country.

It is claimed for Switzerland that no country in the world can offer such a variety of beautiful and imposing scenery within so limited a compass and so easily accessible at every point.

Lakes, rivers and streams are everywhere and the undulating, richly wooded and cultivated stretch of country north and north-west of the Alps is full of beautiful scenery. Switzerland at this time of the year is the tourists' paradise.

It may be truly said that Switzerland embraces both the northern and southern slopes of the highest mountain range in Europe, so that great varieties of climate and temperature are met with within its boundaries.

Towns or villages and health resorts are to be found in almost every conceivable variety of situation and aspect, and at heights above sea level varying from about 700 ft. on the borders of the Italian lakes to 6,000 ft. or more in the high valleys of the Alps. It follows that whatever the time of year and whatever the tastes and inclinations of the visitor, Switzerland can offer a wide choice of suitable spots adapted to the conditions and requirements of every individual and season.

The wide range of temperature and climate is reflected in the wonderful variety of wild flowers, which arrest the attention of even the most unimpressible visitors. From the humble buttercups and daisies of the plains to the "Edelweiss" and "Ranunculus Glacialis" of the snow line, the product of every variety of climate from the Arctic to the Mediterranean is represented in one district or another. An Arcady in reality—violets and primroses, hepatics and crocuses, narcissus and trollius and scillas, are familiar favourites which may be seen in their thousands in any suitable district, while whole miles of hillside are clothed with the crimson "Alpenrose" (a wild variety of rhododendron), and wide stretches of turf are blue with gentians or white with anemones on every mountain slope. Our horticultural readers will surely feast their eyes on such a magnificent spectacle—rightly called "Nature's Wonderland."

Switzerland possesses so many beautiful tourist resorts that to attempt to enumerate them in brief would be futile. Perhaps our travel columns may be further extended to include a description of the better known and more popular centres. But for the present we must content ourselves with just a passing reference. We would, however, pay tribute to the particular claims of Lausanne-Ouchy as an ideal summer resort of peculiar importance.

One of Lausanne's charms (and they are many) is the number of gardens, large and small, which brighten the different parts of the town; lilac and roses in spring, rich foliage in summer, or ruddy tints of autumn (for late holiday-makers), are seen on all sides. Moreover, the town possesses a great number of walks, and well kept public parks.

"Once upon a time" Ouchy was merely a pretty little port surrounded by fields and vineyards. By degrees these were partially replaced by magnificent parks surrounding luxurious palace hotels and superb villas. To-day Ouchy and Lausanne form a united whole, yet thanks to its incomparable quays, its lovely gardens, its shady avenues, its picturesque residences, Ouchy has retained all the charm which used to be due to its natural beauty alone.

Ouchy is a great sunny open space, bordered by hotels, facing the wonderful azure lake, with the Alps of Savoy in the background—ever changing yet serene. Ouchy is the little port of Lausanne, beloved by painters and by tourists, with its fishermen and its rowing folk—those typical silhouettes inseparable from the scene. But it is also the busy roadstead, humming with pleasure steamers, boats, yachts and launches, and graced by those bargues with lateen sails which come over from Meillerie on the Savoy side.

By its situation and its numerous advantages, Lausanne-Ouchy was predestined to become a centre. In particular, however, we would mention Lausanne's famous beach—probably one of the finest fresh water beaches in Europe. Not an artificial beach, but a marvellous natural beach several miles in extent.

Stock Exchange Gazette 10/4/1931.