Zeitschrift:	Helvetia : magazine of the Swiss Society of New Zealand
Herausgeber:	Swiss Society of New Zealand
Band:	37 (1973)
Heft:	[3]

Rubrik: News from Switzerland

#### Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften. 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. <u>Siehe Rechtliche Hinweise.</u>

#### **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. <u>Voir Informations légales.</u>

#### 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. <u>See Legal notice.</u>

**Download PDF:** 17.05.2025

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

# ☆ Wellington Swiss Club

The Club's **Annual General Meeting** will be held on Saturday, 7th April in the Victoria League Hall, Westbrook House, at 8 p.m. A film will be screened: "Saigon Today". —M.K.



#### THERMOMETER FOR THE BLIND

The manufacture of "Cary" thermometers was recently taken over by a Bienne firm. Connected with watchmaking and backed by its years of experience in this field, this factory has added several improvements to this type of instrument, which possesses many advantages over the classical mercury thermometers. It is simple to use and avoids any possibility of error; after taking the temperature in the mouth, armpit, fold of the groin or rectum, it is sufficient to remove the instrument and read the temperature as one reads the time — on a dial graduated in degrees Centigrade or Fahrenheit. Made of metal and plexiglass, this thermometer is unbreakable and completely without danger to the patient. Shock-proof and very accurate, it is available in various versions: medical, with a special variant for the blind, and veterinary with models for both big and small animals.

## ROLLER BEARING TRANSMISSION SCREW

At the 1st International Exhibition of Inventions and New Processes recently held in Geneva, the prize offered by the Swiss Office for the Development of Trade was awarded to a Swiss invention patened by an engineering office in Bienne. It is a roller bearing transmission screw for converting a rotary movement into a linear movement and vice-versa.

The fields of application of this screw are many: micro-technics, measuring instruments, numerically controlled machine tools, chemical and automobile industries, etc. The main characteristics of this device, which revolutionises mechanical transmission systems, lies in the conception of the screen, consisting of a single pillow-block and one or more precision ball bearings. The different ways of mounting are many: simple, in V, stretcher, with possibility of engaging and disengaging while in motion, etc.

This system offers many advantages: the machining of the parts being simple and classical, the cost price is comparatively low; its geometrical characteristics make for precision of adjustment and all movements are carried out smoothly and silently. This device comes in a very wide range of sizes, the minimum thread diameter being 1 mm.

## NEW AUTOMATIC BUILDING - SITE LEVEL

When a levelling instrument is used on a building site or in manufacturing or assembly work, it is seldom handled with velvet gloves. Consequently these instruments have to be made sufficiently strong to provide dependable service in spite of the roughest handling. Well aware too of the necessity for these levels to be simple to operate, the technicians of a Swiss precision engineering and optical firm have produced a new building-site level. This instrument is resistant to blows, shocks and even being dropped. The objective, bull-eyes level and horizontal circle are built as far as practical in the housing itself or protected by it. Even a not very skilled operator quickly learns to use this instrument. The jointhead tripod, the erecting telescope as well as a new diaphragm which provides a warning signal all help simplify and considerably speed up operations. A red warning diaphragm appears in the field of view of the telescope whenever the level is so poorly levelled that the compensator is no longer free to move.

Another new feature is a built-in cross-sight for instruments without horizontal circles. This cross-sight makes it possible to take sights to either side of the level, at right angles to the line of sight. This new level is particularly useful on building sites where right angles frequently have to be laid out or checked.

## SWISS CHEMICAL INDUSTRY ON THE FIVE CONTINENTS

The first Swiss chemical works abroad were set up in France in 1891, in Germany in 1896 and in Poland in 1899. Today, in addition to many commercial agencies and representatives, the Swiss chemical industry controls subsidiary firms going in for production and research on all five continents. These branches manufacture chemical products according to processes perfected by the main Swiss firm, importing from the home country intermediate products, active substances or semi-finished products for processing for local or regional markets or again carry out specific research projects in cooperation with the main firm. It is interesting to note that the number of personnel employed by the branches — in over 50 countries throughout the world — is greater than that of the main firms: the four big multination-type Basle chemical firms have some 140,000 employees, about 42,000 of them in Switzerland and 98,000 abroad.

## A REVOLUTIONARY SNOW PLOUGH

A few months ago we mentioned the success met with at the Brussels Inventors Salon by an engineering works at Schmitten (Fribourg). Among the five gold medals won by this firm, one was awarded for a snow plough of entirely new design. The special feature of this device is that it has two drills and one ejector revolving at different speeds on the same axle. The slowly rotating lateral drum-type drills bring the snow towards the rapidly rotating central turboblower, which blows it out through the ejection tubing. While making the machine more compact, this system ensures increased efficiency and makes it possible to clear snow quickly even after the heaviest fall.

## SPIKE TYRES AND DRY ROADS

As everyone knows, the damage caused by spikes to the roads each winter is counted in hundreds of thousands francs. As a result, the government of the canton of Vaud in Switzerland has decided to introduce a special tax of S.Fr. 100 per winter for every vehicle fitted with spike tyres. A Swiss inventor in Geneva has invented a new type of spike type with all the advantages of conventional spike tyres but without their drawbacks. The tyre has two rows of spikes, on either side of the tread and slightly back from it. On dry roads, at normal tyre pressure, the vehicle runs only on the central tread and the spikes do not come into contact with the road. Whenever the road conditions require, it is sufficient to release a little air from the tyre (300 to 500 gr.) for the central tread to flatten and the spikes to come into contact with the road surface. The inventor has also devised a system of "Mini-Maxi" valves making it possible merely by pressing on a valve to obtain the desired pressure.

