

**Zeitschrift:** Helvetia : magazine of the Swiss Society of New Zealand  
**Herausgeber:** Swiss Society of New Zealand  
**Band:** 82 (2016)  
**Heft:** [4]

**Artikel:** Swiss invention : the first aluminium foil  
**Autor:** [s.n.]  
**DOI:** <https://doi.org/10.5169/seals-944303>

#### **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:** 09.02.2026

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

## Swiss Invention



### The first aluminium foil

Tin was first replaced by aluminium in 1910, when the first aluminium foil rolling plant, "Dr. Lauber, Neher & Cie." was opened in Emmishofen, Switzerland. The plant, owned by J.G. Neher & Sons, the aluminium manufacturers, started in 1886 in Schaffhausen, Switzerland, at the foot of the Rhine Falls, capturing the fall's energy to produce aluminium. Neher's sons, together with Dr. Lauber, discovered the endless rolling process and the use of aluminium foil as a protective barrier in December 1907.

In 1911, Bern-based Tobler began wrapping its chocolate bars in aluminium foil, including the unique triangular chocolate bar, Toblerone. By 1912, aluminium foil was being used by Maggi (today a Nestlé brand) to pack soups and stock cubes.

#### Before aluminium foil

Foil made from a thin leaf of tin was commercially available before its aluminium counterpart. Tin foil was marketed commercially from the late nineteenth into the early twentieth century. The term "tin foil" survives in the English language as a term for the newer aluminium foil. Tin foil is less malleable than aluminium foil and tends to give a slight tin taste to food wrapped in it. Tin foil has been supplanted by aluminium and other materials for wrapping food.

#### Manufacture

Aluminium foil is produced by rolling sheet ingots cast from molten billet aluminium, then re-rolling on sheet and foil rolling mills to the desired thickness, or by continuously casting and cold rolling. To maintain a constant thickness in aluminium foil production, beta radiation is passed through the

foil to a sensor on the other side. If the intensity becomes too high, then the rollers adjust, increasing the thickness. If the intensities become too low and the foil has become too thick, the rollers apply more pressure, causing the foil to be made thinner. The continuous casting method is much less energy intensive and has become the preferred process.

#### Properties

Aluminium foil has a shiny side and a matte side. The shiny side is produced when the aluminium is rolled during the final pass. This difference in the finish has led to the perception that favouring a side has an effect when cooking. While many believe (wrongly) that the different properties keep heat out when wrapped with the shiny finish facing out, and keep heat in with the shiny finish facing inwards, the actual difference is imperceptible without instrumentation.

Editor note: having read this I will no longer worry about which side to use!!!!

#### Uses

**Packaging** Aluminium foil acts as a total barrier to light and oxygen (which cause fats to oxidise or become rancid), odours and flavours, moisture, and germs, and so it is used broadly in food and pharmaceutical packaging.

**Insulation** Aluminium foil is widely used for thermal insulation, heat exchangers and cable liners. Aluminium foil's heat conductive qualities make it a common accessory in hookah smoking: a sheet of perforated aluminium foil is frequently placed between the coal and the tobacco, allowing the tobacco to be heated without coming into direct contact with the burning coal.

**Electromagnetic shielding.** Although aluminium is non-magnetic, it is a good conductor, so even a thin sheet reflects almost all of an incident electric wave.

**Art and decoration** Heavier foils made of aluminium are used for art. Anodizing creates an oxide layer on the aluminium surface that can accept coloured dyes or metallic salts, depending on the process used. In this way, aluminium is used to create an inexpensive gold foil that actually contains no gold, and many other bright metallic colours. These foils are sometimes used in distinctive packaging.

**Geochemical sampling** Foil is used by organic/petroleum geochemists for protecting rock samples taken from the fields and in the labs where the sample is subject to biomarker analysis.

#### Environmental issues

Some aluminium foil products can be recycled at around 5% of the original energy cost although many aluminium laminates are not recycled due to difficulties in separating the components and low yield of aluminium metal.

[https://en.m.wikipedia.org/wiki/Aluminium\\_foil#The\\_first\\_aluminium\\_foil](https://en.m.wikipedia.org/wiki/Aluminium_foil#The_first_aluminium_foil)



#### How To Clean Silver With Aluminum Foil & Baking Soda:

I tried this myself with my fork and spoon set I got from my Godmother when I was about 1 year old.(Editor)

#### What You Need:

- Aluminum foil
- Glass dish or aluminum baking dish
- 1 cup boiling water
- 1 tablespoon baking soda
- 1 tablespoon sea salt
- Rag for polishing
- Tongs to remove silverware from boiling water



## A bit more history...

1. Bring water to the boil. When combined with the other ingredients the water will activate the baking soda and start the process of transferring the tarnish to the aluminium foil.

2. Add the dry ingredients into the pan and slowly pour in the vinegar. You will cause a slight reaction, so pour carefully! It is possible to clean your silver without adding vinegar, but the vinegar will dramatically speed up the process.

3. Pour in the boiling water and then place the silver into your pan, making sure each piece is touching the foil. Try not to let any of the pieces overlap. This should only take about 30 seconds but if you have heavily tarnished pieces you may need to let them soak a few minutes longer.

4. Use tongs to remove the silverware and work off any remaining spots by buffing with a rag. Then, look deep into your shiny silver and admire the smartypants that brought it back to its original glory!



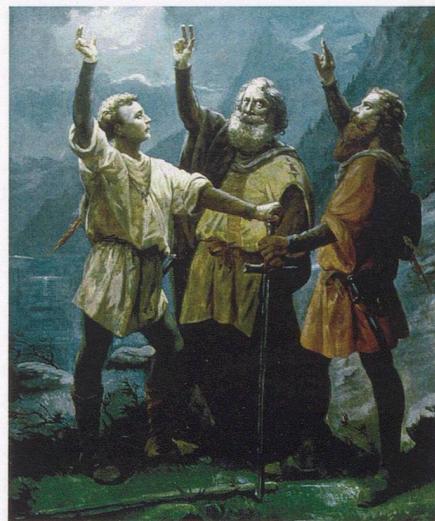
**before**

**after**

Anybody prepared to try the following?

Using Aluminium foil to whiten teeth. How to prepare this homemade tooth paste?

You just need to mix some baking soda and some toothpaste. Then, grab some aluminum foil, and apply some of the toothpaste on the foil and wrap it around your teeth. Leave the toothpaste on for an hour. If you want to get the best results from this whitening method, then you should use it at least 2 times every week. You will notice that this method will make your teeth perfectly white, and you will be amazed by the results.



Source: Jean Renggli 1891

The Schwurhand is a heraldic charge depicting the hand gesture that is used in Germanic Europe and neighbouring countries, when swearing an oath in court, in office or in swearing-in. The right hand is raised, with the index finger and middle finger extended upwards; the last two digits are curled downwards against the palm. The thumb is shown slightly curled or raised.

The use of the gesture dates back many centuries. Recruits of the Pontifical Swiss Guard at the Vatican City use the sign when swearing their oath of allegiance to the Pope, in a ceremony performed on 6 May every year since the Sack of Rome in 1527. The use of the three digits is said to symbolise the three elements of the Holy Trinity.

### In Switzerland

Depictions of the Rütlischwur, the legendary founding oath of the Old Swiss Confederacy in the 14th century, show the participants using this gesture. The people elected at the Swiss Federal Assembly and at the Swiss Federal Council traditionally use the Schwurhand for their oath of office (and say 'I swear'); however, some people do not do it to avoid religious references.

<https://en.wikipedia.org/wiki/Rütlischwur#Schiller>

**TELL SPIELE**  
INTERLAKEN

Performances of the famous play by Schiller that is more than 100 years old, and a wonderful retelling utilising 200 amateur actors from toddlers to sprightly pensioners, not forgetting horses, cows, goats and sometimes even foxes and squirrels. Tell-Freilichtspiele performances run between 21 June to 10 September 2016.

[info@tellspiele.ch](mailto:info@tellspiele.ch) [www.tellspiele.ch](http://www.tellspiele.ch)



### Approximate English translation

We want to be a single People of brethren,  
Never to part in danger nor distress.  
We want to be free, as our fathers were,  
And rather die than live in slavery.  
We want to trust in the one highest God  
And never be afraid of human power.