

# PATENT SPECIFICATION

347,545

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## COMPLETE SPECIFICATION.

### A Toy Caterpillar Tractor.



We, BING WERKE, Vorm. Gebrüder Bing Aktiengesellschaft, of 215, Regensburgerstrasse, Nuremberg, Germany, a Joint Stock Company registered under the Laws of Germany, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to a spring-driven toy caterpillar tractor, which differs advantageously from the known caterpillar tractors in that, instead of the comparatively wide, profiled and therefore expensive rubber bands, simple, plain and cheap rubber cords, of square or other cross section provided with an edge, are employed, the edge alone coming into contact with the ground. The track wheels are accordingly provided with a groove, formed of two surfaces at a relative angle of 90°.

It has been found by experiment that this position of the rubber cords in relation to the ground gives the best effect in respect of adhesion. Irregularities in the surface of the ground, and long ascents with gradients up to 50° are overcome with ease, without any slipping back. This unexpected effect is attributable to the pressure on the ground being very high, by reason of the small surface of contact.

The invention will be clearly understood from the following description aided by the annexed drawings which illustrate a typical embodiment of the invention, Figure 1 being a longitudinal section and Figure 2 a plan.

The rubber cords *a*, serving as caterpillars, engage the ground by means of their longitudinal edges *b*. The wheels consist of two sheet-metal discs *c*, bent over at the periphery so as to form a rectangular groove *d*. The drive is by means of a spring mechanism *e*, the running down of which is controlled by a governor *f*, in the usual way, and is transmitted to the front axle *i* through pinions *g*, *h*.

The casing, which is provided with a driver's cab *k*, and is designed in front as a radiator, is fitted with a brake lever *m*, which acts on a braking member *o* through a drawbar *n*. A draw hook *q* is attached to the frame *p* of the casing.

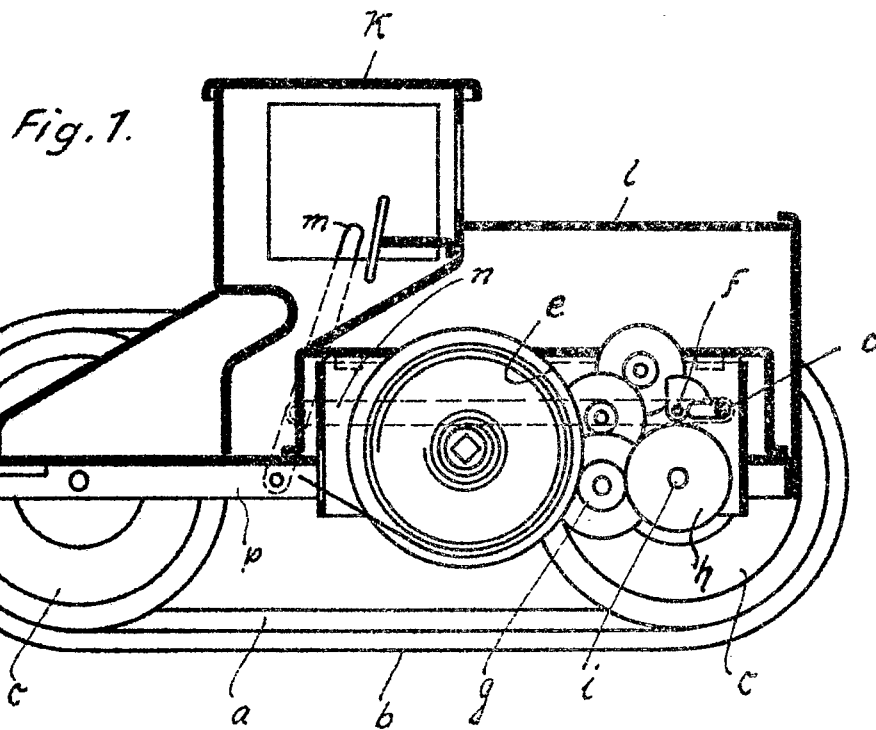
The cross section of the rubber cord may also be rhomboidal, triangular or half square and half round.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

Toy caterpillar tractor, with spring mechanism and rubber caterpillars passed round the track wheels, characterised in that rubber cords having a longitudinal edge by means of which they rest upon and engage with the ground, serve as the caterpillars.

Dated this 7th day of July, 1930.

H. GARDNER & SON,  
Chartered Patent Agents,  
173—4—5, Fleet Street, London, E.C.4,  
Agents for the said Applicants.

*Fig. 2.*