

Le “Mecanophone”

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Figure 1. “Le Mechanophone as it appeared on my 2004 Christmas card.

A Christmas card from Hendrick Strengers (Holland) in 2004 sparked my interest in one of the world’s most unusual outdoor mechanical musical instrument (Figure 1). The card had the usual sentiments of “Season’s Greetings!” in four languages and a photo of a vintage yellow truck with a battery of chrome plated horns. For those of you that know me you are aware of my passion for noise-related mechanisms beyond those of the fair and band organs. Research into this particular instrument has brought to light much more involved mechanical music-related items that will be of interest to the COAA reader.

It seems that the Mecanophone is the brain child of Claude Reboul. The history of Claude Reboul is as interesting as the instrument he assembled. Before 1976 he had many jobs including that of a baker, “clunker” driver, scrap dealer and other such positions. In 1976 he began a most unusual profession, that of a fire-eater (Figure 2). From 1978 to 1983 he was the Guinness Book of Records world record holder of the highest flame produced (seven meters).

Musically he began playing a 24-note barrel organ (manufactured by Christian Bigaud) in 1979 and in 1980, met Pierre Charial, a well-known French organ book arranger. In 1981 he purchased a 24-note reed organ made by France’s André Odin (Figure 3). Apparently he was an entertainer at heart as he made several public appearances with his hand-cranked organ. What relationship between cranking an organ and performing as a fire-eater exists is beyond me unless it is the drive to perform publicly and receive the accompanying attention. If that were the case then the following information on The Mecanophone would be more understandable.



Figure 2. Claude Reboul as a fire-eater in the late 1970s.



Figure 3. Claude Reboul cranking his 24-note Odin organ on a web page advertisement.

What is The Mecanophone?

This instrument (after recognition of the component parts, the term “instrument” certainly applies) is a set of 42 truck horns controlled by a 42-note hand organ build by André Odin, using book music arranged by Pierre Charial. All of this is mounted and transported by way of a vintage Citroën truck.



Figure 4. A 2005 Christmas card showing a winter view of Le Mécaphone.

Another Christmas card (Figure 4) and a different view (Figure 5) help illustrate this assembly of interesting component parts. The instrument gets its name from “mecano,” the person who repairs cars and trucks.

The Citroën is Model U12 and of 1935 vintage. Painted a vivid yellow it stands alone on its own characteristics. It was purchased in 1982 and restored to its current condition. Translation of the “Mechanophone Story” on the Internet reveals:

Combining his passion for automobile mechanics, and his past as a truck driver with his current activity as a ‘crank turner’ [hand-organ grinder—Ed], in 1982 Claude Reboul gets hold of a Citroën lorry dating from 1935 . . . After a meticulous restoration, he transforms it into the itinerant support for a new musical instrument, “The Mécaphone.”



Figure 5. Claude Reboul (left) and a helper pose with Le Mécaphone.

The Citroën truck statistics reveal that it weighs 15 tons and is 19 feet long. A second gear box was added to allow it to move slowly at parade speeds.

The music is programmed by 42-note organ books played on a 42-note Odin organ. The organ is protected by a roofed open framework area (above the truck’s cab) where it is hand-cranked by Mr. Reboul. The key frame is of the Limonaire system but instead of keys used to mechanically activate valves playing organ pipes, contact is made through strips provided with a small dot of silver cadmium, which in turn, is used to activate one of 42 electromagnetic valves. These valves contain magnetic coils, which control the supply of compressed air to each of the truck horns. Each horn is monitored by its own pressure gauge. The air supply is provided by two reservoirs of 100 liters each, which are fed by a 3 HP, 380 volt air compressor. Nearly 400 meters of electric cable was used to make the connections. A 6.5 kW, 220/380-volt generator, of course, operates the compressor.

The smallest horn is 13 cm in length and the largest is 125 cm (5+ " to 49+ "). The horns are chromium-plated steel/bronze and have a screw to allow tuning of the horn. The sound “is produced by a vibrating Rhodoïd diaphragm under the influence of compressed air.”

Is it loud? Specifications are listed from a minimum of 108 decibels to a maximum of 131 decibels (carrying nearly five miles). Is it musical? While I haven’t heard it personally a description by Phillipe Rouillé, in a December, 1999 edition of Mechanical Music Digest, will give the reader an idea: “I was able to listen to Rock Around The Clock, In The Mood and The Fire Dance. . . . A very noisy machine indeed, but playing quite all right, with a good balance of the bass notes and the treble notes, some books having been perforated, if I am not mistaken, by one of our best noteurs in France, Pierre Charial.”

A large selection of music books by Pierre Charial is listed on The Mécaphone web site including the above selections plus other, mostly popular and identifiable pieces.

The Mécaphone gave its first recital at the “Musicora” fair in 1996. It was sponsored by the A.D.A.M.I. (the organization for the management of the rights of performing artists) who along with the General Council of l’ Allier helped finance The Mécaphone project. Since then it has performed for multiple festivals, parades and carnivals.

The Mécaphone is unusual, indeed, but shows the genius of one man who took several component parts, not unusual in themselves, and combined them to make a spectacular mechanical musical instrument.

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