

# The Goulash Cannon

by Kathleen Haak

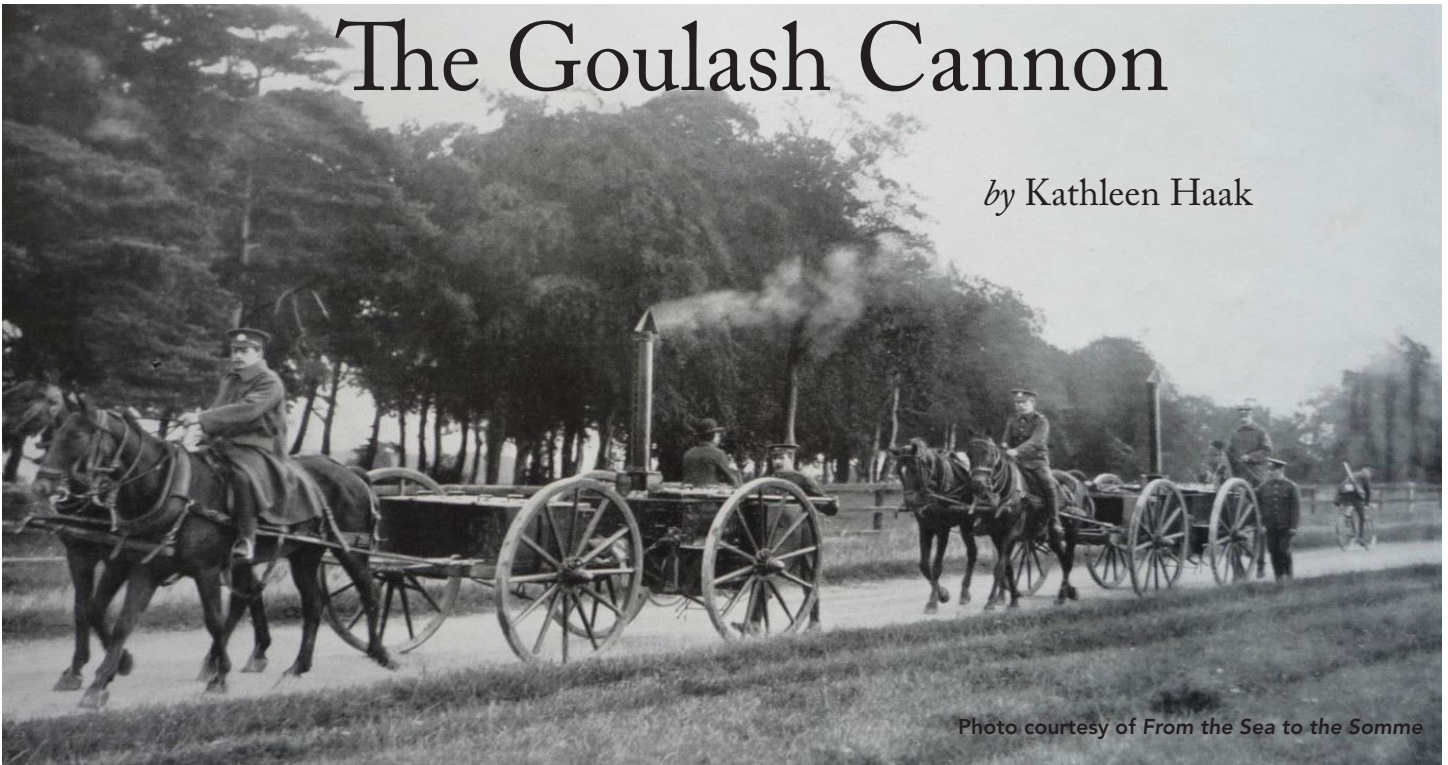


Photo courtesy of *From the Sea to the Somme*

Today our leader wore us out,  
'Till all our bones were shaking,  
He really ran us all about –  
But something good is making;  
First dirt and fleas  
Then bacon and peas,  
Boom! From the goulash cannon!

Heinrich Anacker,  
German Stormtrooper Poet  
Translation of "Peas with Bacon"

Providing nutritious, edible food on the war front is a problem that has plagued the military for as long as there have been soldiers. By the time of the Franco-Prussian War of 1870-71, food services were becoming more and more important. The time involved in preparing individual meals was severely distracting soldiers from their war duties. Tinned foods (developed in 1810) were not satisfactory as military leaders found it is extremely important for morale that soldiers receive a hot meal. Even during Desert Storm, a modern war by all standards, leaders determined that soldiers needed "... to smell the bacon and coffee brewing in the morning."<sup>1</sup> An infantry division (10,000-15,000 men) commonly goes through 70,000 pounds of food in a day, with variances for conditions. Clearly an efficient method of dis-

tributing food, and especially hot meals to soldiers was a priority.

There were many attempts to create the perfect mobile kitchen – in the 1810s there was a wheeled agricultural kitchen which cost 243 thalers and two dimes Prussian Courant (Prussian currency).<sup>2</sup> Another in the 1850s has been described as a four-wheeled handcart with a steam-powered cooker. Properly using steam was clearly the way to go but how to harness it?

During the 1880s a young German named Karl Rudolf Fissler began following in his father's footsteps, learning the plumbing and metalworking business. He was intrigued by steam engines and how steam could be used. By 1892, Karl Fissler had developed the Feldkochherd or Feldkuche (also known as the mobile field kitchen). Fissler's field kitchen made complete menus possible due to its unique boiler system. "While the inner boiler was made of nickel, the outer one was made of copper. Glycerine was placed between the two kettles so that prepared food would not burn."<sup>3</sup> Under the boiler system there was a lining of asbestos fiber that allowed heat without burning up the vehicle. All of this was 'locked' within a square or rectangle shell made of plate steel with a heat source below the shell.

To further combat the heat issue, the field cooker was designed similar to field artillery. The actual cooker was hitched to a light two-wheeled vehicle called a caisson or limber. The front limber often carried rations and

fuel. The front limbers worked in a similar fashion as today's forecarts – they were mass produced in a uniform manner allowing different military vehicles to be attached behind. Because the cooking system was entirely self-contained in the rear limbers, meals could be cooking while the field kitchen was on the move.

Fissler did not achieve financial success through his development of the mobile field kitchen, Germany did not respect the patent and proceeded to use the design without reparation as they prepared for World War I. From Germany, the improved mobile kitchen design was modified slightly by each country as it spread throughout the world. It has been suggested that the some of these changes may have been inspired by Buffalo Bill's Wild West Show which toured Europe in 1891, exposing interested parties to the mobile kitchens of the traveling show. Stainless steel was invented in 1913, creating another modification. It is somewhat difficult to track makers and specs through the various countries but we'll take a look at a few military powers and their use of the mobile kitchen.

**Germany:**

In Germany the cookers quickly became known as "gulaschkanone" or Goulash Cannon, as the furnace tube was reminiscent of a cannon barrel. Most Goulash Cannons could feed 500 men at a time. In Antwerp, Belgium, enemy soldiers captured a few of the mobile kitchens. By all accounts they found them extremely interesting as the Belgian army did not have mobile kitchens until after 1914.



Today, miniature models of German Hf11 limbers and field kitchens are popular with military miniature collectors. Modern versions of the Goulash Cannons are still used in Germany to feed masses of people.

**France:**

The "Cuisine Roulante" or rolling kitchens of France, were primarily made in the village of Charms, specifically the Maguin SAS factory. They began making the kitchens in February 1915 and received an order from the Ministry of War (France) for 300 four-wheel-drive kitchens with four pots to be delivered that same year. Cookers were also made in Aubervilliers during WWI. Régis Carpentier, a historian, has shared many pictures of the factories and different kitchens on the Facebook page, *Cuisine Roulante*.



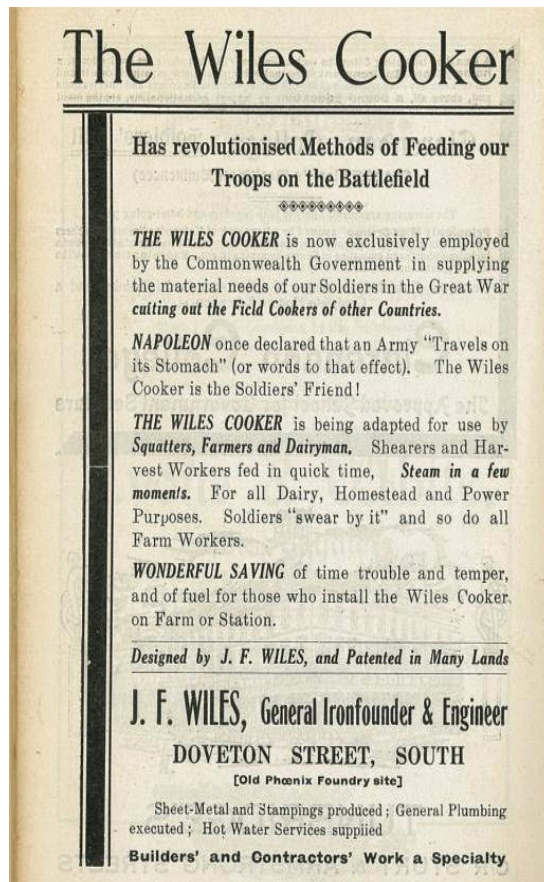
Above: Cooking for French Soldiers during battle. One of the few photos available which shows how the fuel (in this case wood) went into the vehicle. In their way, cookers changed the world culture as, for many men, it was the first time they learned to cook. Part of the George Grantham Bain Collection (Library of Congress).

Right: One of the first French rolling kitchens, in the prototype state. Dated 1908, it was used for tests on the French Army training camps. Note the use of shafts. Most cookers were designed to cook for 500 men at a time but lighter versions, like this, were developed to feed 150-250 men. Photo courtesy of *Cuisine Roulante*.



## Australia:

The Australian version of the cooker was developed by James Wiles just prior to the 1914-18 war and was appropriately named the Wiles Army Steam Cooker. This traveling kitchen was a bit unique in that the steam boiler, roasting oven, hot and cold water tanks as well as the limber were connected by steam hoses. Built for rugged terrain, this unit could travel at a gallop, reaching speeds of up to 35 mph and sustaining them without breaking down. 3 The wheels were readily detachable, making them not only easy to replace but also lowering the pots for more convenient cooking. "Its fuel consumption was only 30% of the official issue. Within 20 minutes of lighting the fire it was ready to prepare a meal, and it could cook on the road whilst travelling at normal convoy speed [25 mph], and supply a battalion with a two course meal. Four gallons of water could be boiled for tea in two minutes."<sup>4</sup> The Australian government purchased over 300 cookers, which were made in Ballarat, Victoria, Australia, but saw active service conditions in Egypt and France.



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Above: An advertisement for the Wiles Cooker shows how cookers were regarded as "the Soldier's Friend."

Right: An early version of a cooker bought by the City of Manchester for British soldiers. Towns, particularly women's groups, were very proud of raising funds to provide hot meals for 'their' men.

## England:

It is somewhat easier to identify British kitchen units from photos as most, but not all, show two horses being driven postilion, whereas European cookers were usually driven from the box seat. *Discovering Horse Drawn Transportation of the British Army* by D.J. Smith gives us a more complete look at the British Traveling Field Cooker:

"The body section or rear limber had a stove and four boiler compartments, each lined with asbestos fibre. The tall stove chimney could be lowered to the horizontal when not in use or when passing under low bridges. Food could be kept hot in the cooker for an almost indefinite period, served whenever a halt was made or camp pitched.

The four limber was 5 feet 3 inches long and 4 feet 8 inches high (from ground level). The rear limber was 5 feet 6 inches long and 5 feet 6 inches high (from ground level, with chimney lowered)."

The Lune Valley Engineering Company of Lancaster and Joseph Sankey & Son, of Albert Street Works, Bilston, Staffordshire and Wellington, Shropshire., made many of the mobile field kitchens for the British during WWI.



Left: Sergeant Campbell and Cook Spencer, Field Kitchen, Gigling Range. DLIFLC & POM Archives



Below: The May 14, 1917, *Bismarck Tribune* shares that the United States may adopt a new type of field kitchen. It has the capacity to feed 250 men at a time.

### United States:

Over 25,000 mobile kitchens were used by American troops in WWI, 10,000 of which were animal-drawn. They were often called Liberty Kitchens or Rolling Kitchens and over 7,000 were shipped to France. The American Expeditionary Force used mobile field kitchens produced by the Tappan Range Company but several other companies throughout the US were involved in producing these kitchens. One of the byproducts of all these rolling kitchens was instant coffee. By October 1918, Uncle Sam was trying to get 37,000 pounds a day of the coffee powder, according to Mark Pendergrast's coffee history, *Uncommon Grounds*. By 1918 the American troops in France were eating about 9,000,000 pounds of food every day.<sup>5</sup>

"Each kitchen consisted of a stove and a limber. The stove unit contained a bake oven and three kettles. The limber contained four bread boxes, which were also used as water containers, one cook's chest, four fireless cookers, and four kettles."<sup>5</sup>

In Europe, with the advent of the automobile, the horses went away and the cooker design was modified to be hauled by automobiles. Today the mobile field kitchen is still in use, particularly in Europe. Following the World Wars some of the technology became 'lost' in the US. The 'new' mobile kitchens developed in 2013 for the US National Guard were hailed because they could cook food in transit. The 'old' mobile kitchens could take up to three hours to cook a meal once they reached their destination. A far cry from the efficiency of the horse-drawn Goulash Cannons of WWI.



### Resources:

1. Gulaschkanoene Kicked Off in 1914, Dec. 16, 2014, [www.rhein-zeitung.de](http://www.rhein-zeitung.de), June 15, 2017.
- 2) Diary of Friedrich von Kurkowski-Eichen
- 3) Gulaschkanoene Kicked Off in 1914, Dec. 16, 2014, [www.rhein-zeitung.de](http://www.rhein-zeitung.de), June 15, 2017.
- 4) The Development for the Wiles Mobile and Stationary Steam Cookers, J. Kenneth Wile, Nov. 8, 2000, [www.nashos.org.au/wiles2.htm](http://www.nashos.org.au/wiles2.htm)
- 5) America's Munitions 1917-1918 Report of Benedict Crowell, The Assistant Secretary of War, Director of Munitions Government Printing Office, Washington - 1919