

Martin Frielinghaus, Möglin

Tillage Implements around 1800

Farm Implements recommended by Albrecht Daniel Thaer (1752 - 1828)

October 26th 2003 marked the 175th anniversary of Daniel Albrecht Thaer's death. He was commemorated as one of the founders of agricultural sciences and an important agrarian reformer. Thaer focused his work on agricultural engineering solutions for his farming theories, too. In his main place of research Möglin, models of some of his recommended farm tools are exhibited.

Albrecht Daniel Thaer was first a doctor in Celle. But soon he found as well his interest for specific horticultural-agricultural questions. Since 1799, as a member of the "Royal Great Britain and Electoral Braunschweig-Lueneburgischen Agriculture Association" he published the "Annals of the Lower Saxony Agriculture". In 1802 he founded an agricultural teaching institute in Celle. From 1804 he worked in Prussia and opened in 1806 the afterwards known "Royal Prussian Academy of Agriculture at Moeglin". He acted as a professor of the Cameral-science in Berlin and as a "Secret upper government adviser". His graveyard is in the Thaer Memorial Centre in Moeglin.

Already very early for his time, Thaer tried to offer farmland technology solutions in the agricultural praxis. Thereby he had two essential objectives. One was the propagation of implements from the progressive British agriculture. Second he put importance on the possibility of the reconstruction for these tools. In 1803 he wrote: "My purpose is and stays from there, not to image another tool, as such, from which utility I am self convinced and which use I am practically learned and totally studied. From these tools I will also give such concrete mathematically and complete image as a whole and single parts, that a worker, that is educated in the use of the younger scale, the circle and the angle scale, and who puts the necessary attention on it, should be able to reconstruct such figures."

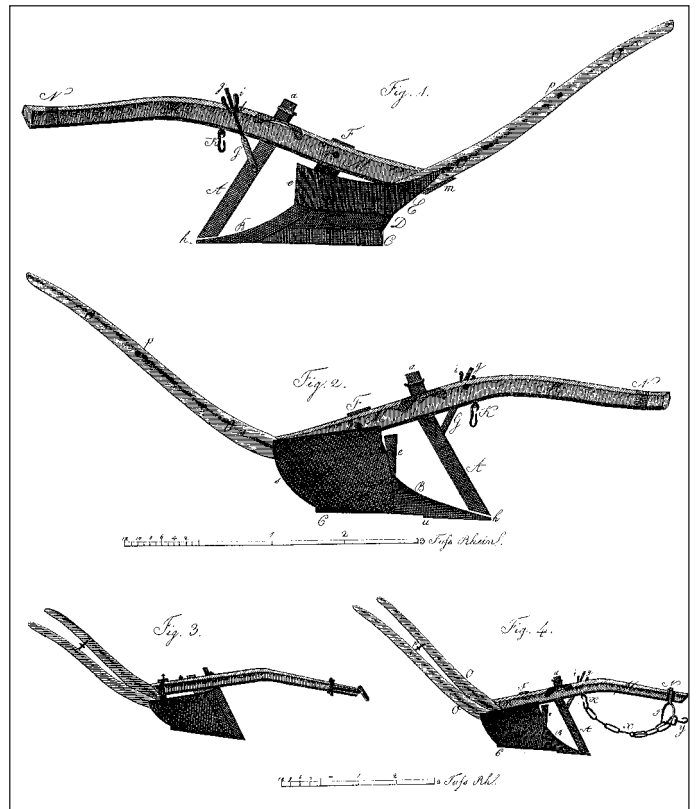


Fig. 1: Plough designed according to Small

The agricultural machinery production has been an own economic field in Moeglin. For example it is written in the main-book of the economy that the income of such sales counts about 349 Taler for the second half of 1808.

Examples

The fund association took Thaer by his words in terms of his reconstruction goals. Some examples were chosen out of his work "Dr. A. Thaers description of the most used agricultural implements", which is published by the brothers Hahn in Hannover in three books with lots of engraving-tables with some explanations rendered. Accordingly reconstructions are exhibits in Moeglin.

Example Plough by Small

Thaer demonstrates with this plough (Fig. 1) a tool, that has been already produced in

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Keywords

Thaer, history of agriculture, agricultural machinery

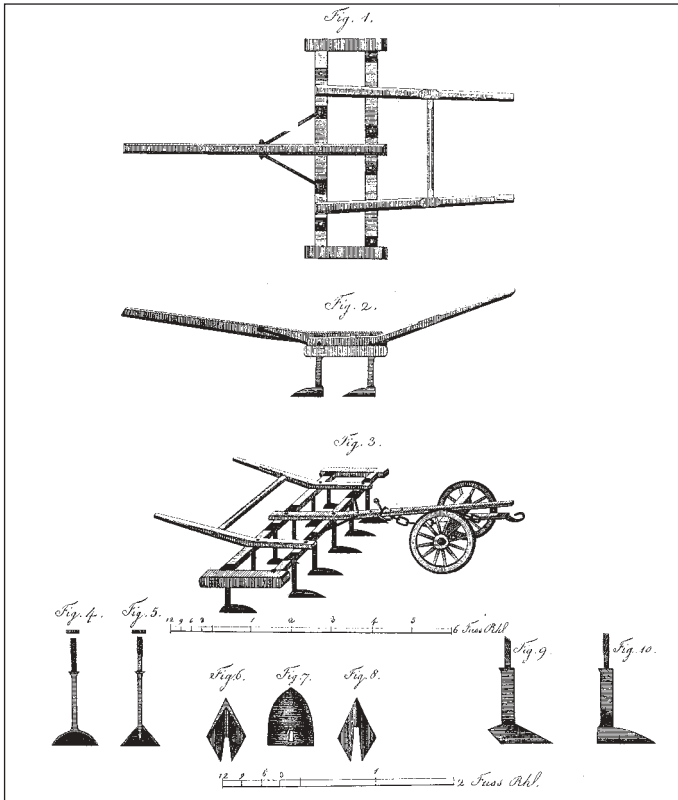
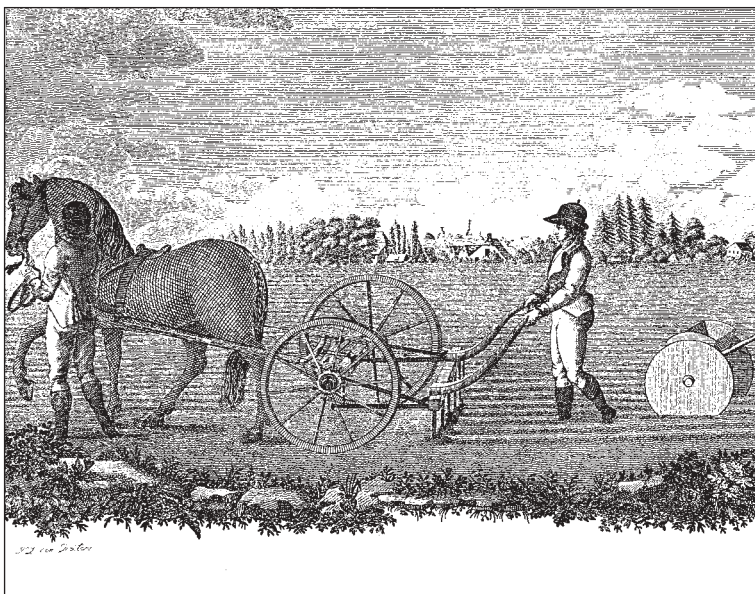


Fig. 2: Extirpator (cultivator) designed according to Thaeer

Scotland. He named it in the English translation as swing-plough and marked therefore this one out from the mostly used wheels-plough (trolleys-plough) at this time. Thaeer referred to the material savings by dropping out the trolley and justified the energetic advantage of the swing principle. As a practical orientated man, with obviously own experiences with this tool, he put attention on the necessity of qualification for guiding it.

springtime ploughing, only the upper centimetres were loosened, while the deeper layers keep their moisture. With the election of cutting-knives (Figure 2, down) it has been possible to adjust the work to the specific



Example Extirpator
The tool (Fig. 2), by Thaeer as well designated as Cultivator, was recommended by him for the mechanic weed-control. He highlighted the advantage whilst working on sandy farmland during springtime. Because, in comparison to the

farmland conditions.

Thaeer pointed out the reduced disposition for obstruction and the reduced effort on animal tractive power.

Example drill-seed

Thaeer explicitly exposed the advantages of drilling in opposite to broadcasting seed by hand and once again evaluated here the English literature. He presented in his book appropriate tools. Figure 3 mediates the principle of drilling in two working steps:

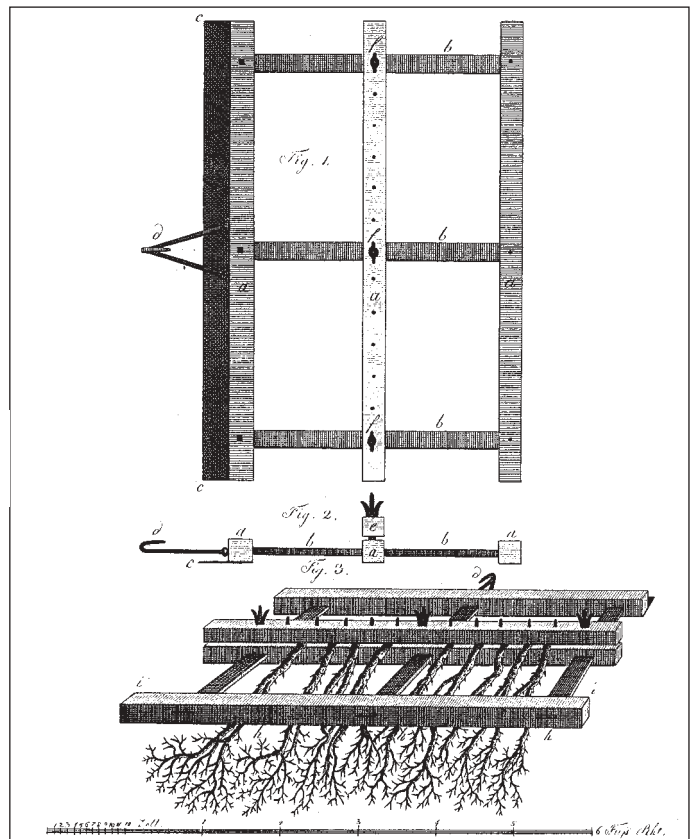


Fig. 4: Mole-harrow designed according to Thaeer

The furrowing and guiding of a seed trolley. The picture shows the demonstration of the technique, probably, according to the actors clothing, out of the Celler time. In the background one can see Thaeers agriculture with the teaching institute.

Example mole-harrow

With the harrow (Fig. 4) presented Thaeer an implement, that has been produced by simple means. A metallic cutting edge loosened the not overgrown molehill on the grassland and the bushes, e. g. *Crataegus*, spread out the detached soil. Trough an additional load it was possible to increase the effectiveness.

Fig. 3: Drill-seeding in two operations