FOCUS SU LEONARDO DA VINCI

"IL TERRITORIO, L'AGRICOLTURA ED IL RISO AL TEMPO DI LEONARDO DA VINCI"

UN GRANDE IMPULSO PER LO SVILUPPO DELLE TECNICHE AGRICOLE IN LOMELLINA

Associazione Culturale La Citta' Ideale The Ideal Town

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- FOREWORD OF LOMELLINA`S ENVIRONMENT
- STORIES AND LEGENDS ABOUT GROWING RICE
- TOOLS AND IMPLEMENTS AT THE TIME OF LEONARDO
- NEW TECHNOLOGIES AND INNOVATIONS
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- MAP OF TERRITORY

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-FOREWORD OF LOMELLINA`S ENVIRONMENT

The risaia it is the element that characterizes this wraps of land. The landscape of the Lomellina is much homogenous one: but this homogeneity, constructed entire from humans, is the result of centuries of great jobs of transformation of the territory. Works of irrigation and canalization of waters between the end of 1300 and the 1500 have allowed to clear the swampy zones, to water barren lands, to increase the pastures and to increase the breeding. The cultivation of the rice came introduced in XV the century and knew one good spread thanks to the favorable climatic conditions and the abundance of water channels. This type of cultivation was a lot important for the family of Sforza and, in particular for Ludovico Sforza, called the Moor. It made to construct to flour mills and channels, and it gave assignment to "Leonardo from Wins" to study and to construct a system of channels in order to perfect the roads of water, necessary to the transport of the goodies. These roads had also to concur the irrigation and the reclamation of the many lands that were still swampy. However it has been begun, the risicoltura like agricultural phenomenon of wide economic and social importance, taken shape in XV the century, leaving from the Lomellina and expanding themselves quickly to north near Milan and of Novara. In the 1500 Agostino Gallo from Brescia it wrote the first garnishments for the cultivation of the rice and began to give a sense to the agricultural techniques.

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-STORIES AND LEGENDS ABOUT GROWING RICE

The first famous note of the cultivation of the rice in Italy is written in a letter of the 27 september 1475. Galeazzo Maria Sforza, duke of Milan, promises to the ambassador of the Duke of Ferrara, in its court, to give to him twelve bags of rice, in order to seed them around to Ferrara. The day after, 28 september, Galeazzo Maria, with a second letter to the Parks Guard , G. Guascono, orders the delivery, authorizing the exit of the bags from the Ducato. This was the first exportation of rice between Italian regions and therefore it is believed that the cultivation was already in action from some year in some areas of property of the Duke. The twelve bags yielded to Ferrara were the harvest of seed at least a bag of seed .For the Duke of Milan, the cultivation of the rice was begun some year before, in 1472 in the "ducal" estates. The rice was an important food for the citizen of Milano It was different from usual foods made up of cereals and legumi and moreover its cultivation was one profitable production.

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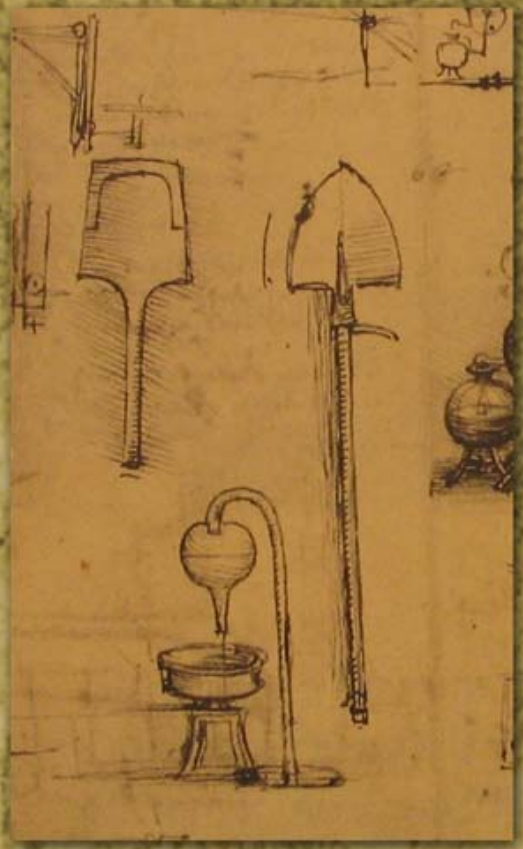
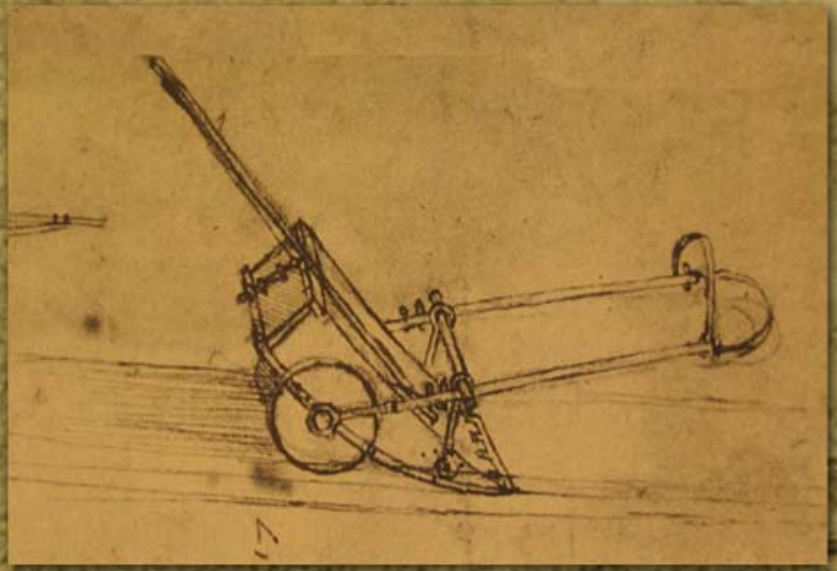
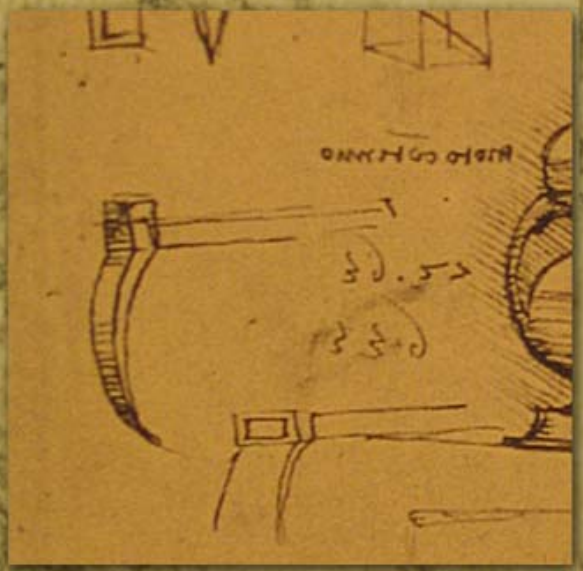
-TOOLS AND IMPLEMENTS AT THE TIME OF LEONARDO







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-RECLAMATION AND IRRIGATION

The manuscript also contains a great number of sketches; they are mostly projects for the building of hydraulic structures that, bending to the stream and the movements of water. This hydraulics structures permit the distribution of the water for the irrigation.

LEONARDO' S WORKS ON HYDRAULICS

"Adì 2 febbraio 1494 alla Sforzesca ritrassi scalini 25 di 2/3 l'uno larghi braccia 8[…]" (MS. H, f. 65v.).

"Nessun incastro dee esser più stretto che il suo universal canale, perché l'acqua fa retrosi e rompe l' argine" .
(MS. H, 28v.)

In the area of the Sforzesca it is still possible to recognize the works that Leonardo drew in his manuscripts, for example, the work "tre incastri" – three joints – that regulates the flow of water

From the irrigation channel to the fields; it is a structure built in the shape of a trapezium arch that provides to the nearby field the right amount of water.

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"Il Territorio, l'agricoltura ed il riso al tempo di Leonardo da Vinci"

Un grande impulso per lo sviluppo delle tecniche agricole in Lomellina

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-NEW TECHNOLOGIES AND INNOVATIONS

HAULED GRADING MACHINE TYPE LUCCIOLAwith stationary axle, not en largeable – single wheels

It is a construction of high technology. encased chassis like a swan neck, with wide light between blade and chassis, that allows containing a large quantitative of land and at the same time it carries out a tumbling of it, perfect and fast. it is born to levelling in greenhouses, gardens, sport fields, large squares and in means to tree-lined cultivations. perfect for powers from 40 cv and more.The width of the standard blade is 1, 60 meters, with possibility to carry it until 2, 20 meters.Technical data: 1. system with a manual control direct from the tractor2. system with an automatic control through laser under the hydraulic controls of the tractor, piloted by laser3. system with a completely separate auxiliary control with tank and p.t.o. driven indipendend pump.OPTIONAL:1. width of the advanced blade from 1,60 to 2,20 meters2. 1 middle shaft for laser receiver with valve of block with excursion of 800 millimetres3. 1 middle shaft for laser receiver with valve of block with excursion of 500 millimetres4. posterior lighting equipment with 3 lights5. blade horizontal inlination (n. 01 jack complete of tuble and switch)

SCRAPER Model NM6 - NM10 >> MACHINE IN MOTION

<< TOWED SCRAPER APPROVED FOR TOWING

ON THE PUBLIC HIGHWAV AND EXEMPT FROM ROAD TRAFFIC LICENCE

General Information:Trailed scraper with 4 large wheels located at the rear, towed by agricultural trac or. The innovative aspects of this machine consist in the convenience of handling and transport combined with modest dimensions, which allow it to be used on the road without a licence. Thanks to the design and construction of the tubular steel chassis, featuring compact dimensione but with high strength, we have been ablie to minimize overal width while maximizing the width of the blade. Tipper body in heavy gauge pressed steel pivoting on bushes, giving a rigid strutture without the need for bracing with struts or tension rods. Which would serve only as an impediment during loading and unloading operations. Operation by means of hydraulic cylinders:- One cylinder mounted on the drawbar serving to raise and lower the machine, controlled manually or automatically by meens of a laser system, taking oil from the tractor control circuits, or with its own auxiliary system and a p. t. o. driven pump.- One hydraulic cylinder mounted vertically on the chassis, controlled hydraulically using the tractor circuits and interlocked to the laser receiver. - Two side mounted hydraulic tipper cylinders, controlled manually from the tractor spool valve.The machine can be supplied in 3 versions::1. System controlled manually, direct from the tractor 2. System operated automatically using the hydraulic controls of the tractor, piloted by laser 3. System with completely separate auxiliary control, with tank and p.t.o. driven independent pump.

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