1. Record Nr. UNINA9910254358103321 Autore Rossi Cesare Titolo Ancient Engineers' Inventions: Precursors of the Present // by Cesare Rossi, Flavio Russo Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-44476-X Edizione [2nd ed. 2017.] Descrizione fisica 1 online resource (425 p.) Collana History of Mechanism and Machine Science, , 1875-3442;; 33 Disciplina 620 Soggetti Engineering design Machinery Technology—History Archaeology History **Engineering Design** Machinery and Machine Elements History of Technology History of Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Premise: Representing and Measuring the Environment -- A premise: it Nota di contenuto all started with a drawing -- I.1 Elevations, Plan and Sections -- I.2 Protohistoric Drafting machine for the clay tablets engraving -- I.3 Examples of planimetries from the IV millennium B.C. to the I century A.D. -- I.4 Ancient Units -- 1. Measuring Mass -- Introduction -- 1.1 The balance scale -- 1.2 The steelyard balance -- Observations -- 2 Measuring Distance and Slope -- Introduction -- 2.1 Jacob's staff --

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This book describes the inventions and designs of ancient engineers who are the precursors of the present. The period ranges mainly from 300 B.C. to 1600 A.D. with several exceptions. Many of the oldest

inventions are documented by archaeological finds, often very little known, mainly from Pompeii, Herculaneum and Stabiae and reveal a surprising modernity in their conception. Most of the inventions presented in the first four parts of the book were conceived up to the late Roman Empire and may be considered as milestones, each in their respective field. The fifth part concentrates on more recent centuries. The sixth part deals with some building construction techniques. Generally, for each of the presented inventions, three elements of research and reference are provided: written documents (the classics), iconic references (coins, bas-reliefs, etc.) and archaeological findings. The authors did not write this book for engineers only; hence they describe all the devices without assuming wide technical knowledge. The authors' main aim is to try to communicate their enthusiasm for the inventions and the inventors of the past and to contribute to the fascinating study of the History of Engineering. This second edition includes new topics and chapters that are of special interest to engineers.