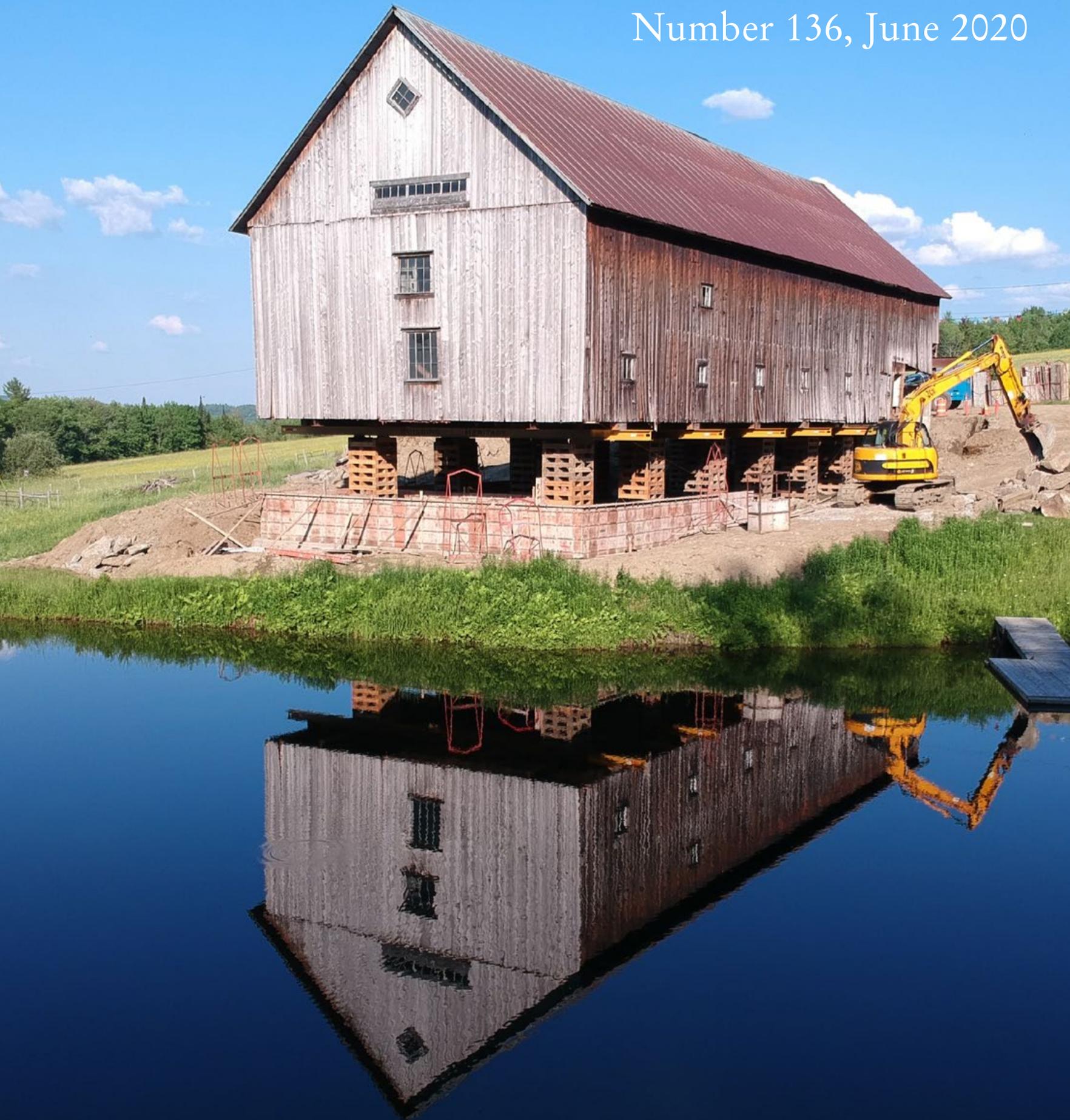


TIMBER FRAMING

JOURNAL OF THE TIMBER FRAMERS GUILD

Number 136, June 2020



New and Renewed in Vermont

TIMBER FRAMING

JOURNAL OF THE TIMBER FRAMERS GUILD
NUMBER 136 JUNE 2020

CONTENTS

- BOOK REVIEW: CRUCK BUILDING 2
Jack A. Sobon
- A HYBRID FRAME IN VERMONT 4
Will Gusakov
- SAVING A LARGE NEW ENGLAND BARN 8
Eliot Lothrop

On the cover, Wolcott, Vermont, barn lifted and shored in place while a new foundation is poured. See article, page 8. Photo: Alex Howe. On the back cover, Bedstone Manor (1448), Shropshire, England. Drawing shows asymmetry common in cruck framing, including molding details. In photo, massive free dovetail linking cruck blade and spur. Drawing and photo: M. Moran (from Cruck Building).

Copyright © 2020 Timber Framers Guild
116 Pleasant Street, Suite 334, Easthampton, MA 01027
833-862-7376 | info@tfguild.org

Editorial Correspondence

Please email journal@tfguild.org.

Editors Michael Cuba, Adam Miller

Editor Emeritus Kenneth Rower

Contributing Editors

History Jan Lewandoski, Jack A. Sobon

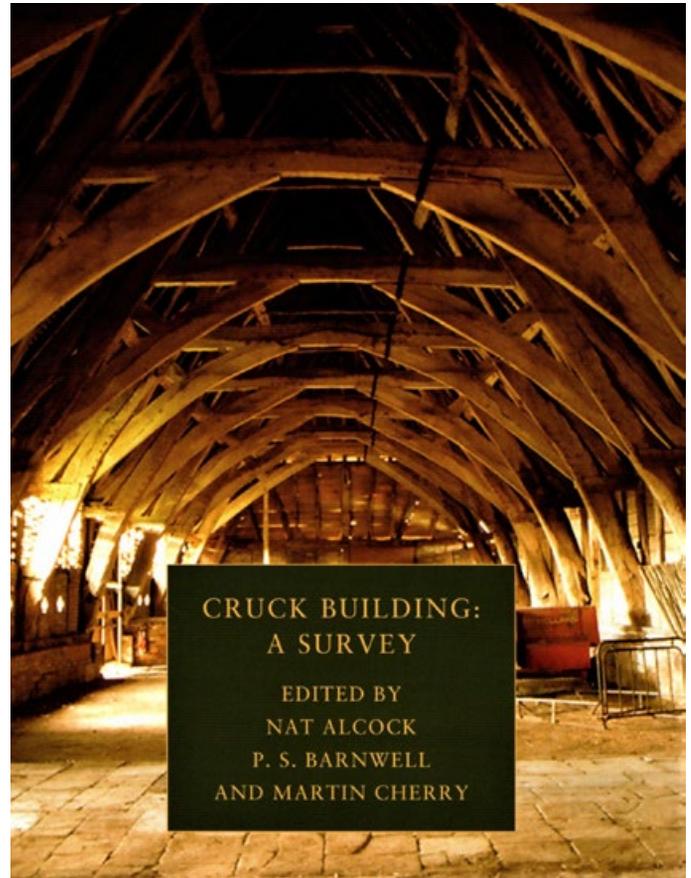
Engineering Ben Brungraber, Tom Nehil

Layout/Design Erin Moore

Printed on Anthem Plus, an FSC® certified paper

TIMBER FRAMING (ISSN 1061-98WW60) is published quarterly by the Timber Framers Guild, 116 Pleasant Street, Suite 334, Easthampton, MA 01027. Subscription \$60 annually or by membership in the Guild. Periodicals postage paid at Becket, MA 01223 and additional mailing offices. POSTMASTER: Send address changes to Timber Framers Guild, 116 Pleasant Street, Suite 334, Easthampton, MA 01027.

TIMBER FRAMING, Journal of the Timber Framers Guild, appears in March, June, September, and December. The journal is written by its readers and pays for interesting articles by experienced and novice writers alike.



Cruck Building

Cruck Building: A Survey. Nat Alcock, P. S. Barnwell, and Martin Cherry, editors. Donington, UK: Shaun Tyas, 2019. 7½ in. x 10 in., 406 pp. 421 illustrations. Hardcover, £50.

CRUCK framing is a historic method of timber building, found primarily in the British Isles, where the roof is supported by pairs of curved or elbowed timbers (called cruck blades) rising from the sill and joined at their apex, an early A-frame (Fig. 1). Since I first saw images of cruck frames in the classic book *Shelter* (Shelter Publications, 1973) back in the '70s, I have been smitten with their beauty, grace, and charm, constructing my first cruck frame in 1985. While numerous articles have been published on individual structures, and crucks as a building type are covered in books by Innocent, Brunskill, Harris, and others, I had long known of only two books devoted entirely to crucks. The first, *Cruck Buildings*, a small, obscure, self-published volume by B. Bunker (1970), apparently not well received by the mainstream historic building research community, is a look at the crucks of North Derbyshire and South Yorkshire. While including a handful of photos, drawings, and maps, this volume is mostly written descriptions of individual buildings, leaving me wanting to see and learn more. The other, *Cruck Construction: An Introduction and Catalog*, by N. W. Alcock, published in 1981 by the Council for British Archaeology, takes a scholarly approach with contributions from multiple authors and members of the Vernacular Architecture Group (a primarily British organization, formed in 1952, devoted to the study of vernacular buildings in the landscape, with programs including conferences and an annual journal—the inspiration for North America's Vernacular Architecture Forum). The chapters in *Cruck Construction* cover cruck

terminology, documentary sources, distribution, regional variations, carpentry, and frame erection, as well as a catalog of the over 3000 cruck buildings known at that time. This catalog lists such things as number of crucks, apex joinery type, and blade shape (curved, straight, elbowed, ogee, etc.). Though it was still somewhat obscure, a poorly bound softcover bereft of photographs, this was in effect the standard reference for cruck building, my go-to volume, at least until now.

In 2017, the University of Oxford, the Vernacular Architecture Group, and the Oxfordshire Buildings Record held a weekend conference on cruck building. Papers presented there formed the nucleus for a new book. With new research, especially contemporary dendrochronology, and a thousand or so additional crucks documented, it was certainly due. *Cruck Building: A Survey* is the new standard reference for cruck enthusiasts. While Alcock again features prominently in the book, a host of other experts cover various aspects of cruck building, ranging from documentary and archaeological evidence to regional cruck typologies from Devon to Scotland, here supported by copious illustration.

My favorite chapter is “The ‘Nuts and Bolts’ of Cruck Construction,” written by TTRAG member Daniel Miles. He covers the carpentry of joining odd-shaped components—blades, spurs, yokes, saddles, and packing pieces—into these graceful structures, many standing since the 13th century. Cruck apex joinery is particularly interesting. The original carpenters made use of a variety of configurations (at least 18 have been cataloged). Some blades were joined to each other by mortise and tenon, others lapped or simply butted and aligned by a large pin. Many made use of connecting components like yokes or saddles that in turn supported a ridge. When cruck blades were a bit short, or the curves too pronounced or too straight, the carpenter varied the joinery to make it work (Fig. 2). One often finds different apex joinery from cruck to cruck in the same building.

A chapter by Bob Meeson covers base crucks, a somewhat similar-looking form to full crucks but within a decidedly different structural system. Base crucks are curved posts (like cruck blades) in aisled structures that support the tie beam and arcade plates, feet spread apart to effectively open up the full floor width. The most defining feature of base crucks is that they support a level arcade plate, while full crucks support purlins tilted in the roof plane. The end walls in base cruck frames often have the normal, vertical posts supporting the arcade plate. Dendrochronological evidence points to the base cruck being earlier than the full crucks.

If there is any shortcoming to this book, it is that the “Nuts and Bolts” chapter is too short. I was hoping that there would have been coverage of the actual scribing process involved, the setting-out marks, level marks, and evidence of daisy wheels. I would like to have seen a study of component numbering systems and evidence of the tools and techniques used to fashion them. There is somewhat better coverage of these items in another book by Alcock and Miles, *The Medieval Peasant House in Midland England* (Oxbow Books, 2013). These aspects of historical cruck carpentry could fill an entire volume, perhaps something Miles has in the works.

If you are smitten with crucks half as much as I am, this 400-page, generously illustrated book will surely quench your thirst. Back in 1990, the London *Times* showcased a cruck frame being raised by Carpenter Oak & Woodland, thought to be the first new cruck frame put up in Britain in at least 300 years! Many have since followed there as well as here in the United States. Judging by how quickly cruck framing workshops seem to fill up, a comeback of this glorious system is surely on the way.

—JACK A. SOBON

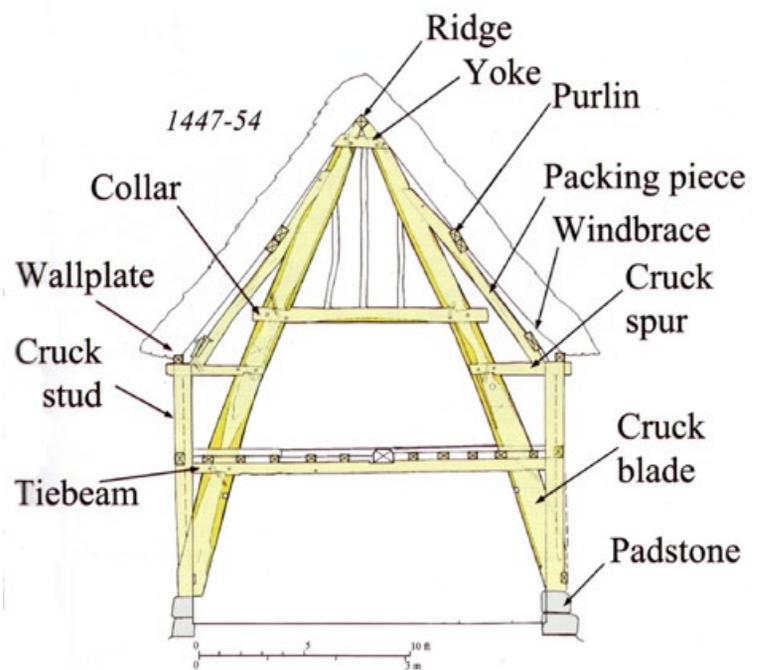
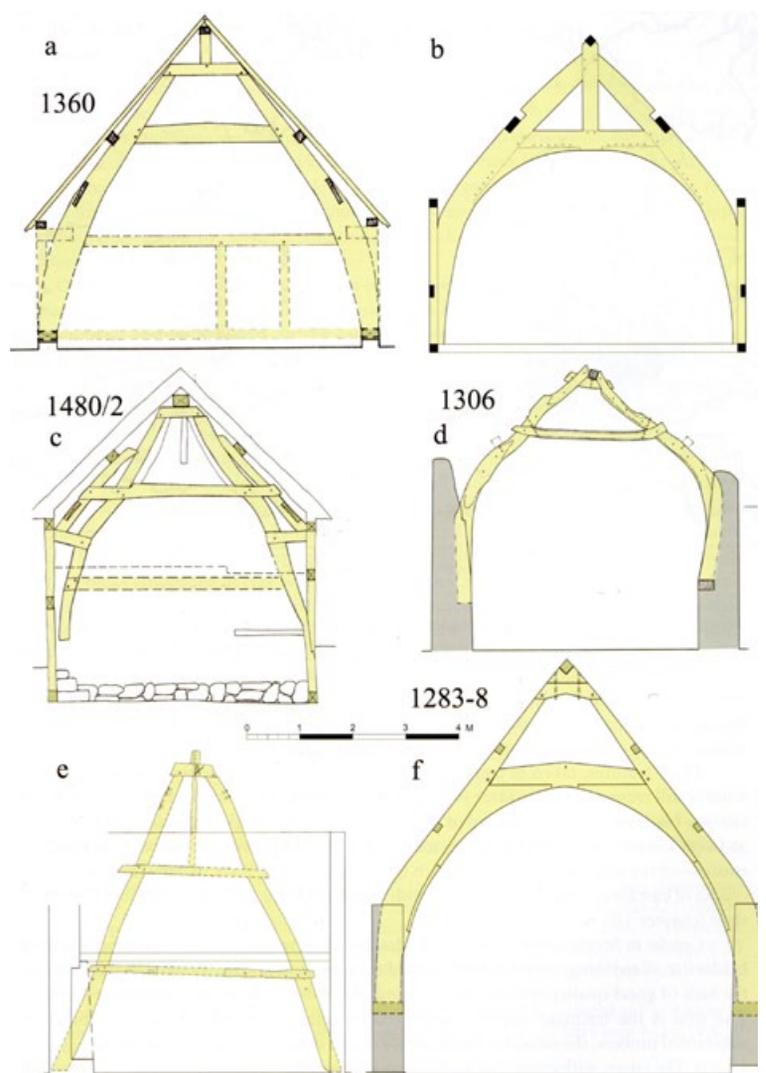


Fig. 1 and 2 drawings from *Cruck Building*

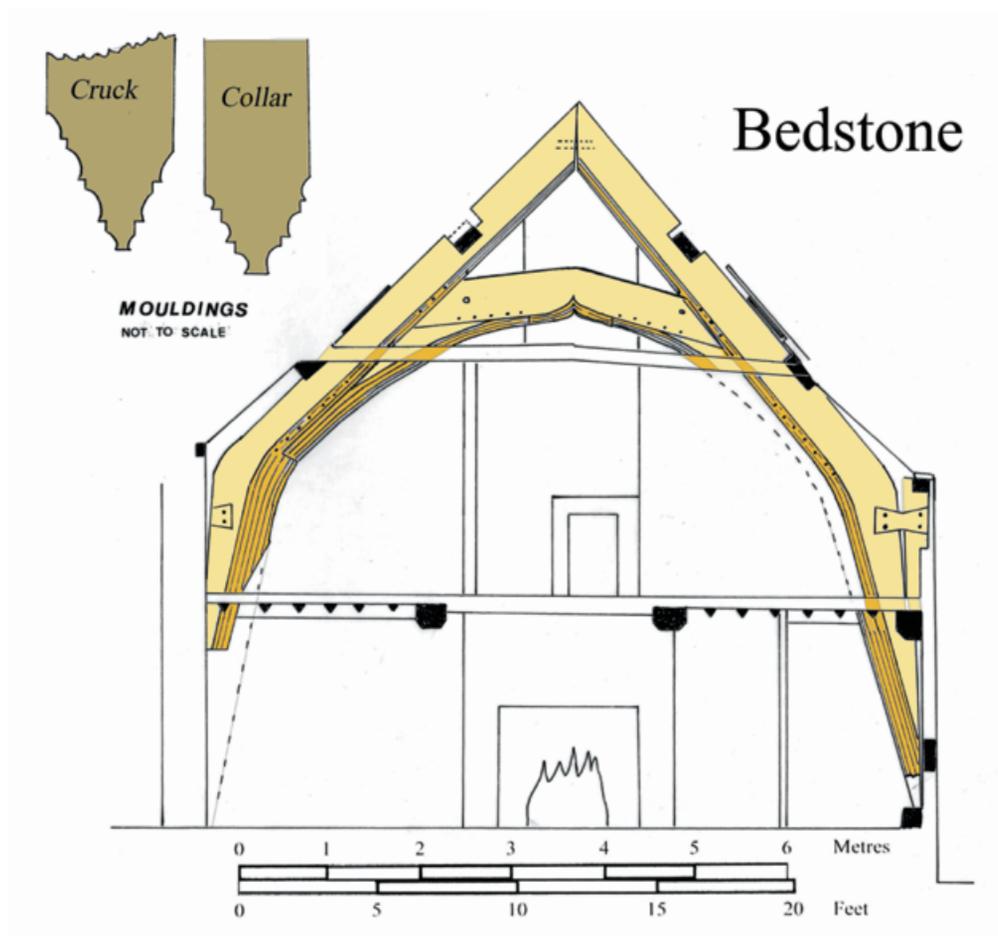
1 Parts of a cruck truss, illustrated using a cruck (1447–54) from Normanton-on-Soar, Nottinghamshire, England.



2 A diversity of cruck types.



PUBLISHED BY
THE TIMBER FRAMERS GUILD
116 PLEASANT STREET, SUITE 334
EASTHAMPTON, MA 01027



The Guild thanks Foard Panel for their sponsorship of the printing of *Timber Framing* during this difficult year. It is heartening to know that our member companies see the value that *Timber Framing* brings to our members and industry. Thank you, Foard Panel.