building as culture
COMMONWEALTH OF AUSTRALIA  
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do not remove this notice
the Burj Dubai, Dubai, by Skidmore, Owings & Merrill LLP, 2003-8

Miles Lewis [ed], Architectura (Sydney 2008), p 104

Skyscrapers: the Empire State; Taipei 101; Eiffel Tower; CN Tower, Toronto, &c

http://burjdubaiskyscraper.com/
the great bulk of building activity is not at the cutting edge

habits persist

the building practices of one nation differ from another

ideas spread from one nation to another in the same way as practices in cooking, ways of dancing and forms of humour

in this sense building is a cultural activity
timber building in Europe

logs
palisades
crucks
frames
the forested areas of Europe
log construction
principal types of log construction

top left: simplest form
bottom left: top and bottom notched
centre: as used in Sweden
right: the corner of a barn, Sandsede village, Swedish Lapland

reconstruction of roofing used in Russian medieval domestic architecture, by M V Krakowski & B D Grekov

Rice, Russian Art, p 99
reconstruction of a typical long house, Neolithic village of Köln-Lindenthal (near Cologne), Germany, c 4000 BC

early stave building, Hemse, Gotland, Sweden

MUAS 5,284
CRUCKS
suggested development of the cruck frame

West, *The Timber-Frame House*, p 22
‘cruck-truss' construction

'Cruck Cottage', Didbrook, Stanway, Gloucester-shire, no date

THE GROUND SILL
posts or studs, with and without a ground sill

West, *The Timber-Frame House*, p 21
Glastonbury, c 200 BC: overlapping ends of two planks with square mortices for wattles, and a larger one presumably for a corner post

interpretation of a structure from Valkenburg, Netherlands, of the Roman period framing and wattling in trenches

E M Jope [ed], *Studies in Building History* (London 1961), p 21
excavation of a structure at Valkenburg, Netherlands, of the Roman period, indicating framing and wattling on sole plates

Jope, *Studies in Building History*, p 21
the terra cotta tile
the roofing tile

A

hand made types

the crown or shingle tile tegula & imbrex
the Flemish or pantile
the Spanish or Cordoba tile
the *tegula* – [pl tegulae] - the flat or concave tile which covers the roof surface

the *imbræx* [pl imbræces] - the concave tile which protects the joint

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**classical Greek roof tile types**

J J Coulton, *Greek Architects at Work* (London 1977), p 34
Roman temple, Caravaca de la Cruz, Murcia, Spain, C2nd BC:
reconstruction of the terracotta tile roof and revetment

F B Yagüe, *El Santuario Ibero-Romano de la Encarnacion, Caravaca de la Cruz, Murcia* [leaflet] (Caravaca de la Cruz [Murcia] 1995), no page
tile roof in Prague, Czech Republic

Miles Lewis
roof tiles from the Forbidden City, Beijing, China

Miles Lewis
Spanish tiles
the pantile or Flemish tile roof at Hinxton, England
generic drawings

Miles Lewis
El Tajar tileworks, Guatemala: mould & forme
Miles Lewis
El Tajar tileworks, Guatemala: filling the mould

Miles Lewis
El Tajar tileworks, Guatemala: the filled mould
El molde lleno
Miles Lewis
El Tajar tileworks, Guatemala: transferring the tile to the fourme

Miles Lewis
El Tajar tileworks, Guatemala: the drying ground

Miles Lewis
Chinese tile making on a tub, Tiangono Kaiway, 1637

French Marseille tiles
the roofing tile

B

pressed types

(the Marseilles tile)

Gilardoni
Muller
Martin Frères
SA des Tuileries, Marseille
mould for a tile press

Gilardoni roofing tiles (Montchanin type, right)

Pierre Chabat, *Dictionnaire des Termes Employés dans la Construction* (Paris 1875), p 1423
tile with vent by Muller Frères, Alsace, 1855 (shown at the Paris Exposition) and reconstruction of the basic form

Civil Engineer and Architect's Journal, XX, 277 (April 1857), p 112
Miles Lewis
the Gilardoni tile

reconstructed 1855 form

as illustrated in E O Lami, *Dictionnaire Encyclopédique et Biographique de l'Industrie et des Arts Industriels* (9 vols, Paris 1881-91), VIII, p 845
the Marseille tile mystery

a roofing tile little known in France, outside Marseille

hardly known in Britain or the United States

extensively used in Turkey, India, Argentina, Australia
tiles exported from Marseille, 1860 (manufacturer not stated)

Colonial Mining Journal, 4, September 1860, p 15
the first Marseille tile roof in Australia
‘North Park’, Melbourne, 1888-9

Miles Lewis
Guichard, Carvin & Cie tile
David Callow
bee brand on the nose of a Guichard, Carvin & Cie tile

David Callow
turtle brand on Tuileries de la Méditerranée tiles, 1908 (‘Warra’), Victoria

Miles Lewis
domed mud brick houses at Abu Ghal Ghal, northern Syria.

Miles Lewis

domed houses at Harran, southern Turkey.

From South-Eastern Anatolia and the Gap Region, no date.
flat plate adobes drying at Uragli, Turkey.

Miles Lewis
block-shaped adobe of the Urartu culture, Tesheban citadel, Armenia, 732 BC.

Miles Lewis
The Arab village of Balaban, southern Turkey.

Miles Lewis
Kurdish mud bricks at Çavustepe village.

Photo: author

Kurdish mud brick mould at Yalindamlar

Photo: author
the monolithic arch
the principle of the arch

Miles Lewis
the monolithic arch: the church at Sitt-er-Rum, Syria, 6\textsuperscript{th} century AD.
Miles Lewis.
S Pedro de la Nave, late C7th

S Paul, Jarrow, c 685
The monolithic arch: S Pedro de la Nave, near Zamora, Spain, late century AD.

Photos: author.
The monolithic arch:
East church at Jarrow, England, c 685: arches in the north wall.

Photo: author.
Engraving from M A S Hickmore, *St Paul’s Church, Jarrow*, p 74.
the Mayan false arch
Mayan false arch at the ‘Governor’s Palace’, Palenque, Mexico, c 600-800 AD, and in the cloister of the Convent of La Recoleccion, Antigua, 1701-25.

Miles Lewis
lehmwickel
half-timbered house in Hildersham Cambridgeshire

MUAS 8,380

fachwerk cottage of a German-Swiss immigrant, Columbiana County, Ohio, USA, c 1847

E V Gillon, Early Illustrations and Views of American Architecture (New York [1971]), p 43
fachwerk house, Hahndorf, South Australia

John Archer, *Building a Nation* (Melbourne 1987), p 54
wine grower's house from Sachsenflur 1562
Hohenloher Frieland Museum
view and detail in the attic

Miles Lewis
Haus Sachsenflur view and detail of the lehmwickel

Miles Lewis
139 Main Street, Lobethal South Australia


Burgers' farmhouse near Penshurst Victoria, c 1854

Miles Lewis
the Burger farm, photograph of the 1870s
(held at the property)
the Burger stables
external panel
internal details

Miles Lewis
ceiling of the Burger cottage

Miles Lewis 1974
house at Paechtown, South Australia: view and detail of lehmwickel ceiling
Robert Moore & Sheridan Bourke, Australian Cottages (Port Melbourne 1989), p 45
reconstructing a lehmwickel ceiling
Szentendre Museum
Hungary

Sajbán Tibor
Fachwerk construction at Harmonie, Indiana, USA

Don Blair, *Harmonist Construction*, plate VII & p 59
‘Dutch biscuits’ at Harmonie, Indiana, USA

Don Blair, Harmonist Construction, p 55
lehmwickel & quenouille ceilings

Schloss Huhen-Tübingen, Germany, C16th
detail of ceiling: Dr Hubert Krins

L'Abbaye de la Lucerne, Western Normandy, C16th: J-C I Yarmola

Chateau of Chateaudun, Loire Valley
France: Allan Willingham
La Ville-Cotterel, Montauban, France, 1729: detail of quenouilles

Miles Lewis
Europe in 528

the apotheosis of the brick veneer

32 Gilbertson Street, Essendon, designed and built by J J Clift, c 1928
Joe Clift in 1983

Miles Lewis
the Burj Dubai, Dubai, by Skidmore, Owings & Merrill LLP, 2003-8

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