

TRAINING WITH MARNIE OLD

OAK BARRELS: FRENCH vs. AMERICAN



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AMERICAN OAK:
NEW KID ON THE
BLOCK – NOT
NEARLY AS WELL
RESPECTED

FRENCH OAK:
PRIZED BY
WINEMAKERS
FOR CENTURIES

OAK BARRELS: FRENCH vs. AMERICAN



NEW
AMERICAN
OAK BARRIQUE:
\$300 TO \$800
EACH

NEW FRENCH
OAK BARRIQUE:
\$900 TO \$1800
EACH

WHY BARRELS?



WOODEN VESSELS WERE AN IMPROVEMENT
OVER CLAY & EARTHENWARE

WHY OAK?



SOFTWOODS:
EASY TO BEND
INTO ROUND SHAPE,
BUT NOT WATERTIGHT



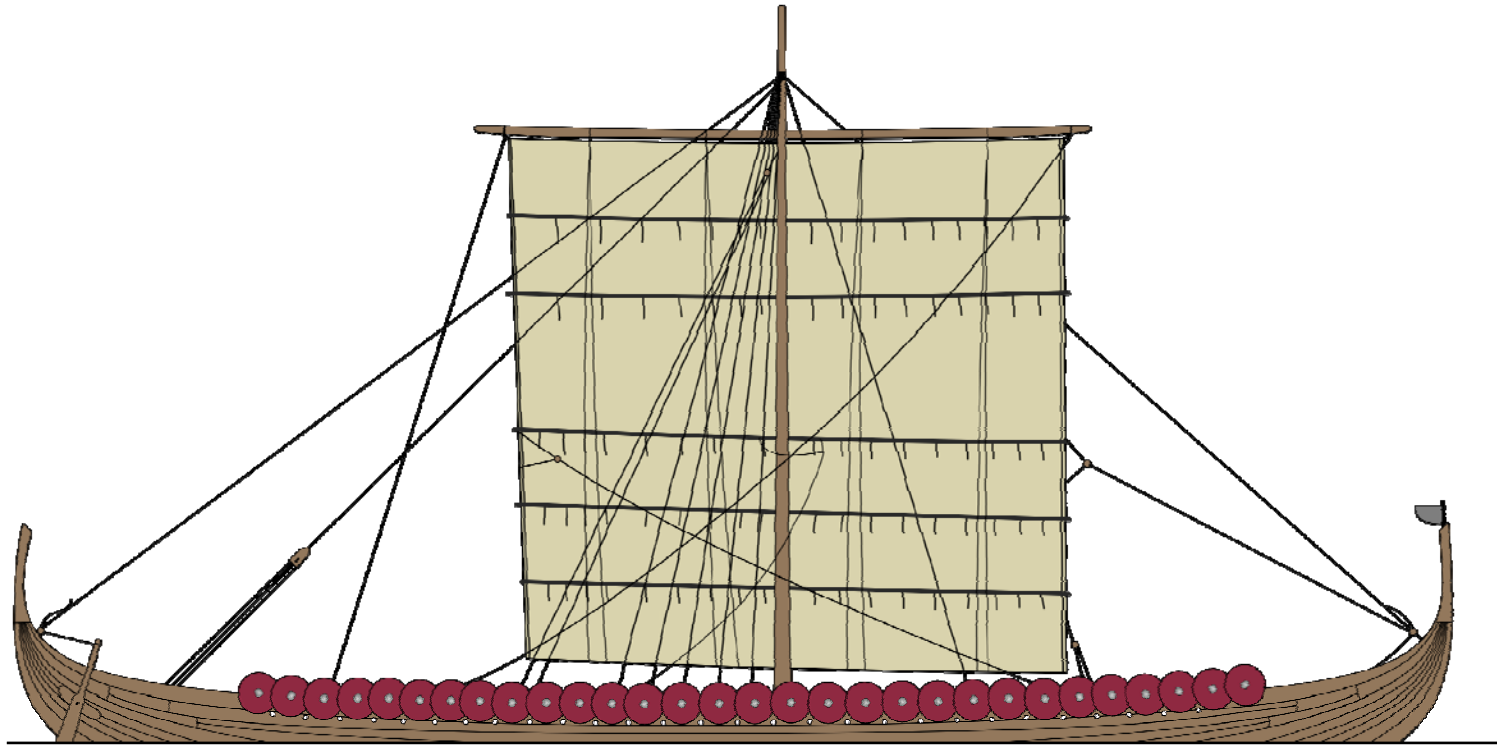
HARDWOODS:
WATERTIGHT,
BUT HARD TO BEND
INTO ROUND SHAPE

WHITE OAK IS PERFECT!



- TIGHT-GRAINED HARDWOOD
- CAN BE BENT WHEN HEATED
- HIGH IN FLAVORFUL COMPOUNDS LIKE VANILLIN – YUM!

IDEAL FOR BUILDING



SEAFARING VESSELS

AND ALSO FOR BUILDING



VESSELS TO CONTAIN LIQUIDS

EUROPEAN "WHITE OAK" & "COMMON OAK":



QUERCUS PETRAEA & QUERCUS ROBUR

FRENCH OAK: WHITE OAK & COMMON OAK



L = LIMOUSIN

A = ALLIER

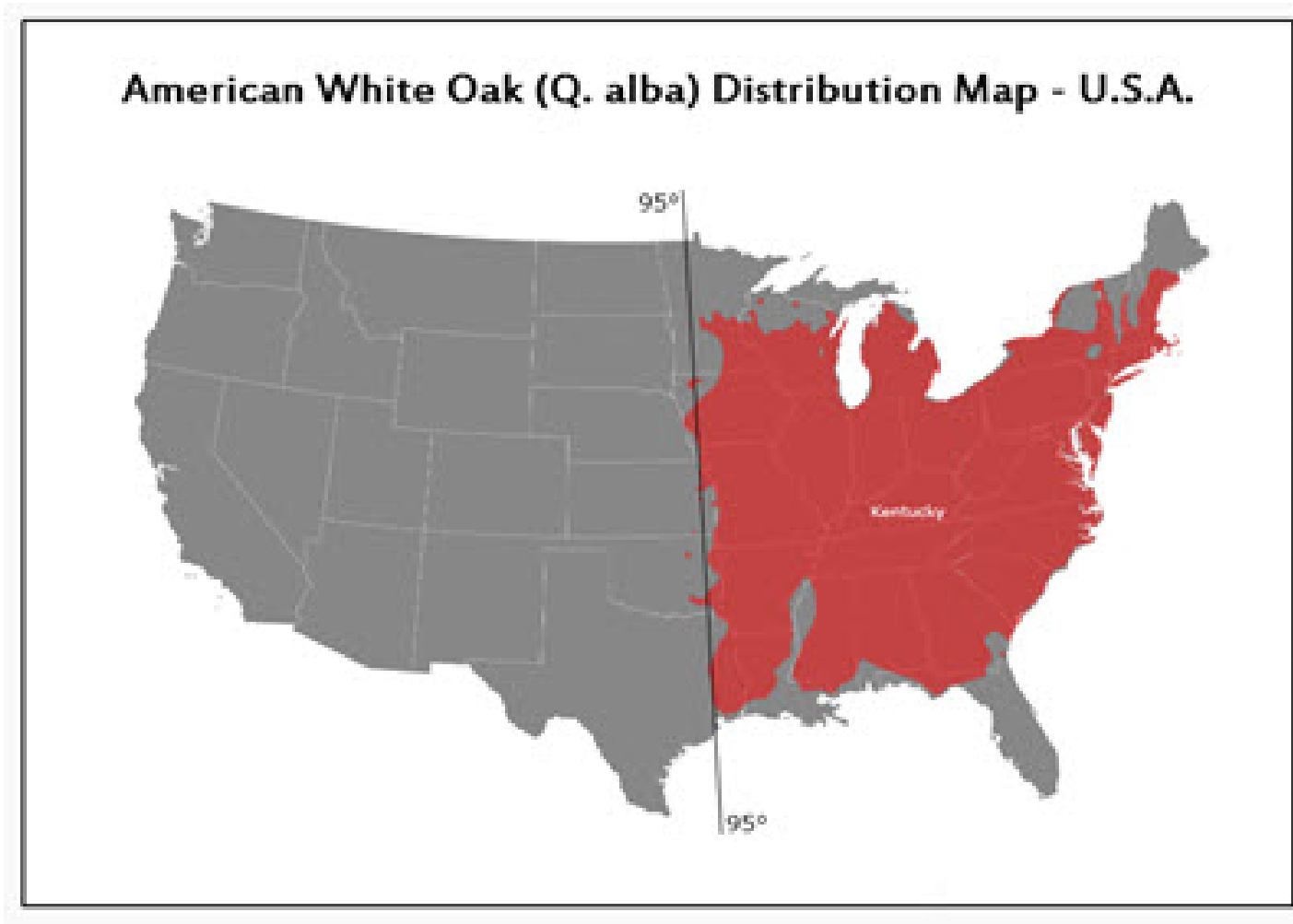
T = TRONÇAIS

N = NEVERS

B = BOURGOGNE

V = VOSGES

AMERICAN "WHITE OAK": QUERCUS ALBA



AMERICAN "WHITE OAK": QUERCUS ALBA

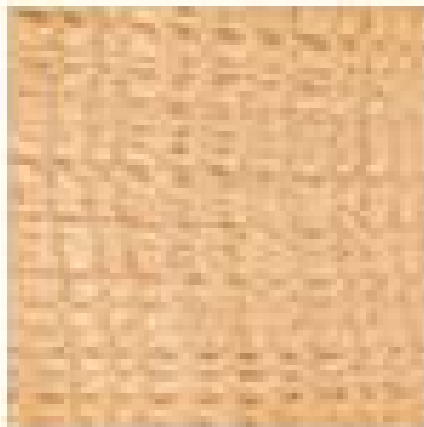


GRAIN IS ALWAYS FINEST IN THE COLDEST FORESTS

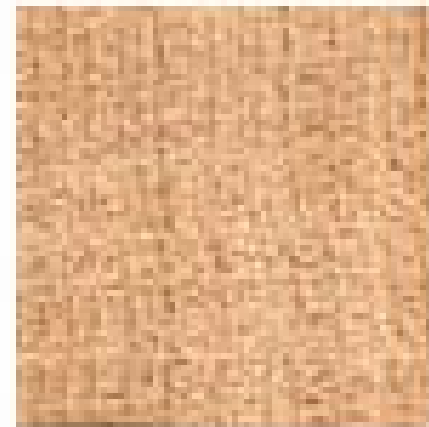
Medium



Fine



Super fine



FLAVOR DISTINCTIONS

FRENCH OAK BARRELS:

- **LOWER IN VANILLIN AND LACTONES, SO Milder in flavor**
- **HIGHER IN TANNINS AND PHENOLS, SO MORE EFFECTIVE AT PRESERVING WINE**

AMERICAN OAK BARRELS:

- **HIGHER IN VANILLIN AND LACTONES, SO Milder in flavor**
- **LOWER IN TANNINS AND PHENOLS, SO LESS EFFECTIVE AT PRESERVING WINE**

NOT SIMPLY TYPE OF OAK

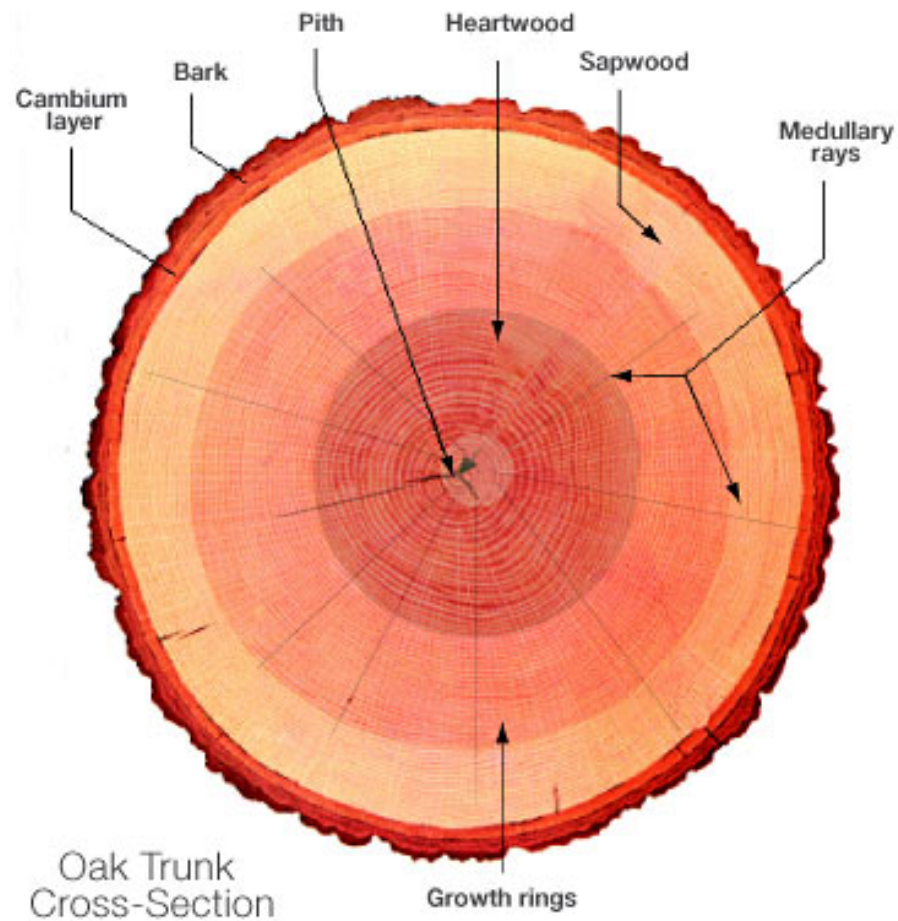
FRENCH OAK BARRELS:

- TRADITIONAL
TECHNIQUES
- SPLIT WOOD IS
CURED OUTDOORS
FOR 2-3 YEARS
- CURING LEACHES
OUT HARSH SAP
COMPONENTS

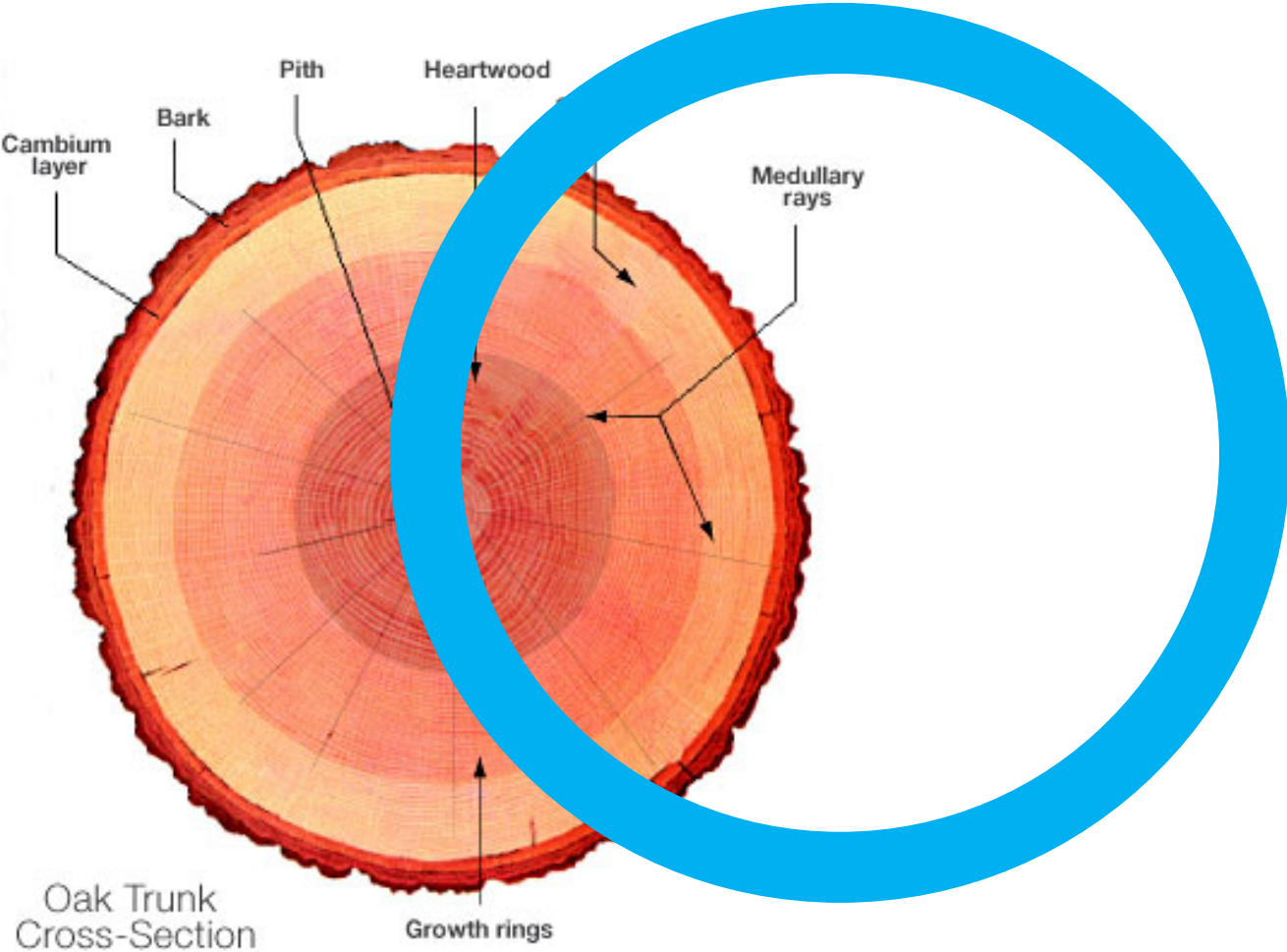
AMERICAN OAK BARRELS:

- MODERN
TECHNIQUES
- SAWN WOOD IS
KILN-DRIED FOR
MAX. EFFICIENCY
- KILNING BAKES IN
HARSH SAP
COMPONENTS

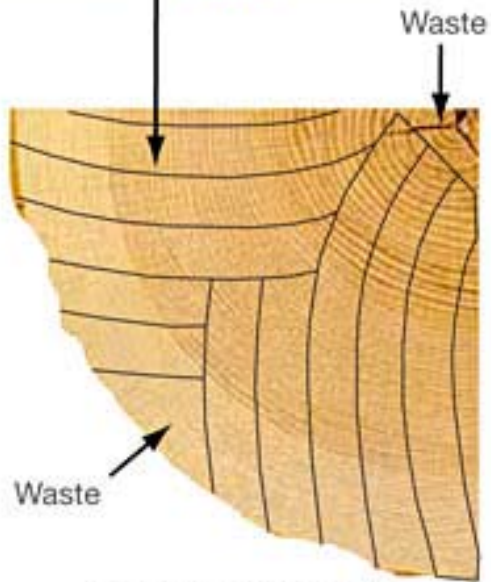
WHY CAN'T FRENCH OAK BE SAWN?



NOT WATERTIGHT IF MEDULLARY RAYS ARE CUT



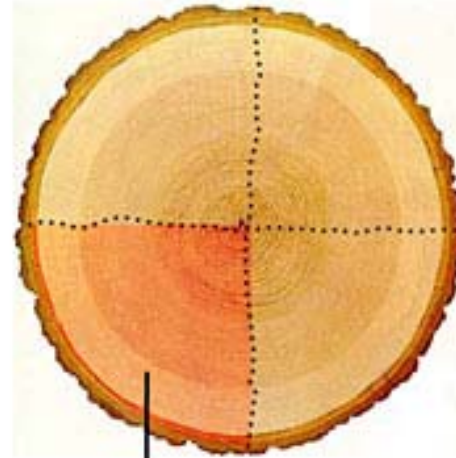
Quarter Sawn American Oak



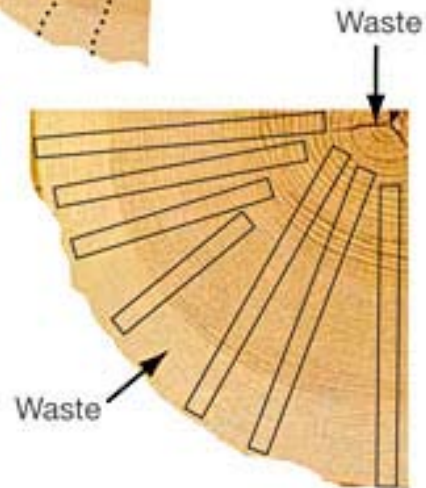
A sawn barrel quarter according to the traditional method.

———— saw cuts

Hand Split European Oak



A split barrel quarter according to the traditional method.



..... splits

NOT SIMPLY TYPE OF OAK

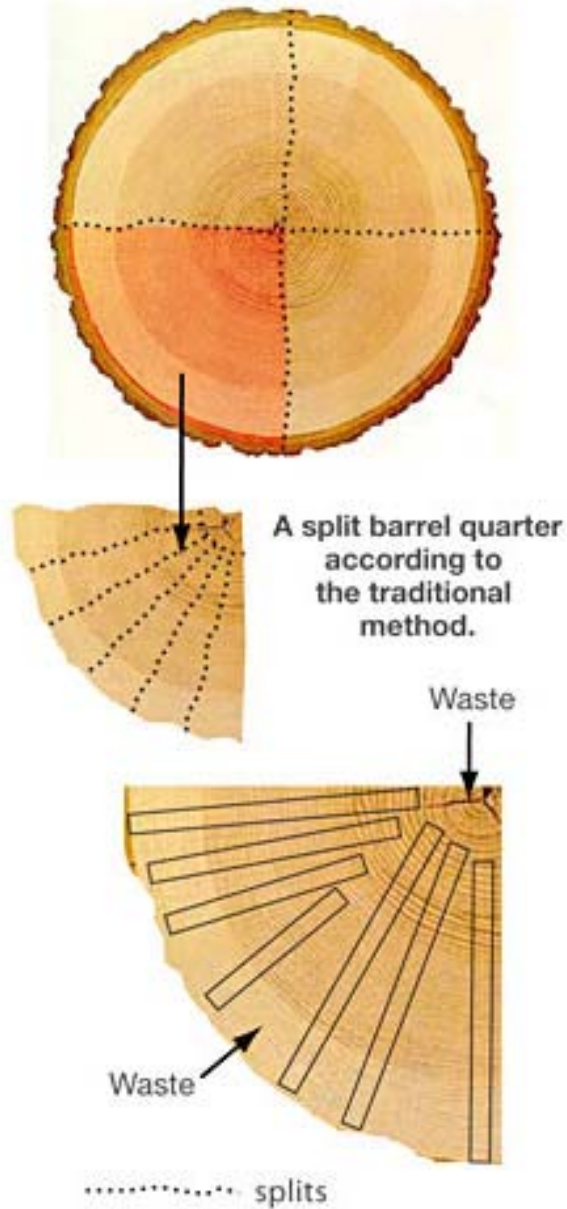
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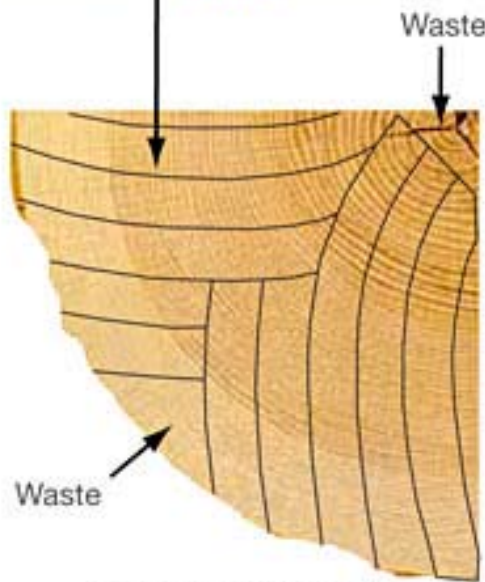
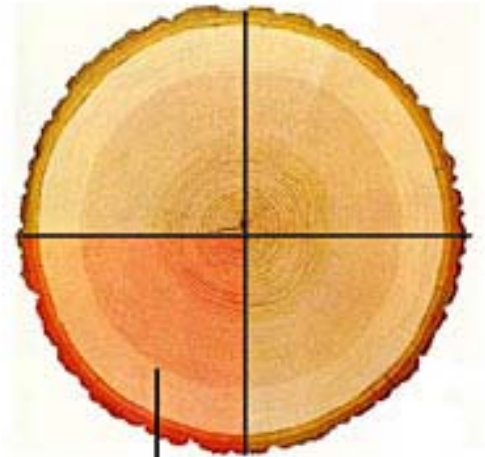
Hand Split European Oak



FRENCH: ALWAYS SPLIT

- ADVANTAGE:
DOES NOT RUPTURE
THE WOOD'S
CELLULAR WALLS
- DISADVANTAGE:
ONLY 20% OF THE
WOOD IS USABLE
FOR BARREL-MAKING

Quarter Sawn American Oak



A sawn barrel quarter according to the traditional method.

—— saw cuts

AMERICAN: USUALLY SAWN

- ADVANTAGE:
OVER 75% OF THE
WOOD IS USABLE
BARRELMAKING
- DISADVANTAGE:
SAWING RUPTURES
WOOD'S CELLULAR
WALLS, RELEASING
HARSH COMPOUNDS