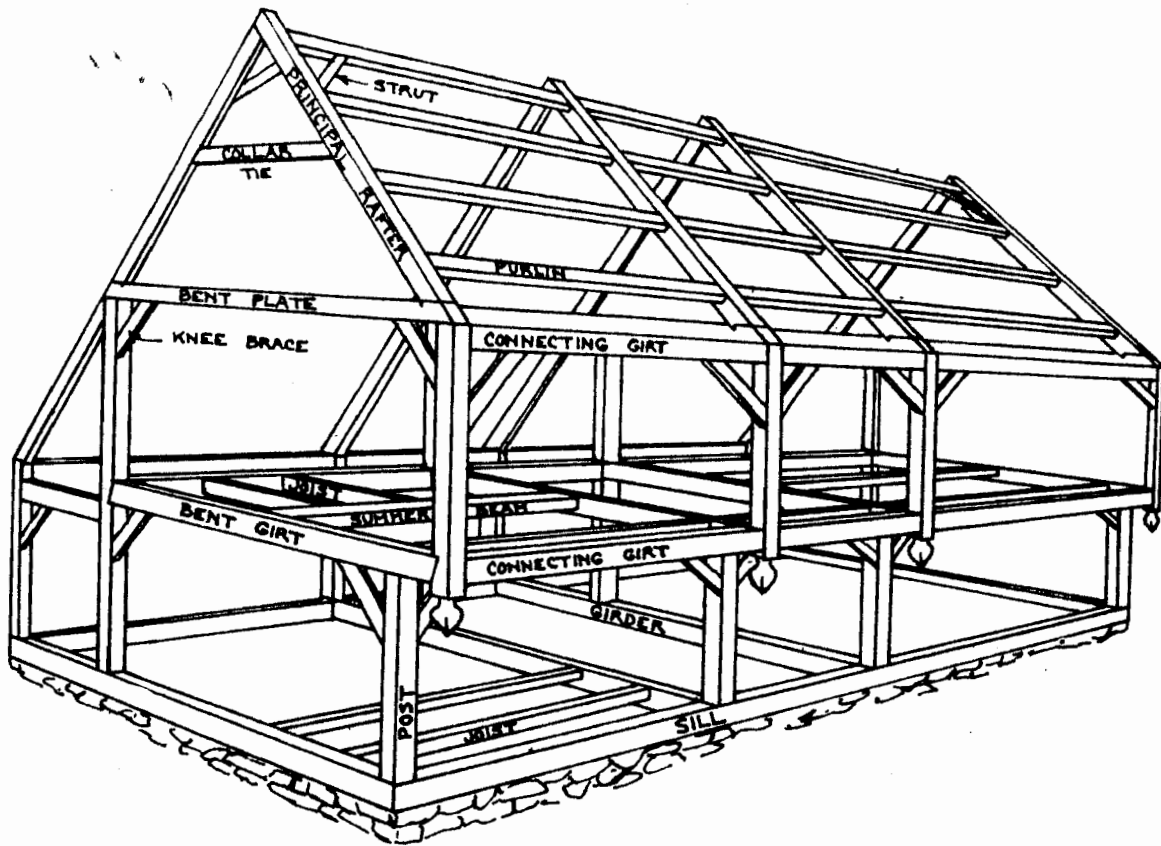


TIMBERS OF THE FRAME



THE FRAME

THE FRAME IS A SERIES OF ROOF TRUSSES AND BENTS THAT ARE ATTACHED TO SILL TIMBERS BELOW AND CONNECTED WITH GIRTS AND PURLINS. GIRDERS, SUMMER BEAMS, AND JOISTS ARE PLACED TO SUPPORT THE FLOORS. COMMON TIMBERS OF THE FRAME ARE:

SILL TIMBERS: HORIZONTAL TIMBERS THAT REST UPON THE FOUNDATION.

BENT TIMBERS (NOT INCLUDING THE ROOF TRUSS): A VARIETY OF BENTS ARE ILLUSTRATED LATER. THEIR TIMBERS ARE CALLED:

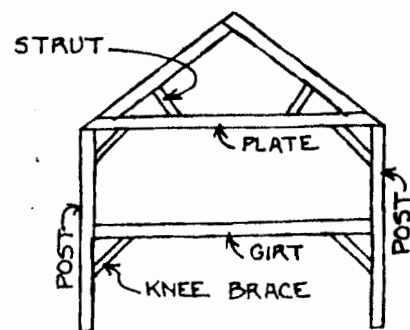
POSTS: VERTICAL, OR UPRIGHT, TIMBERS.

BENT GIRTS: MAJOR HORIZONTAL TIMBERS THAT CONNECT THE POSTS. NOT INCLUDED ARE THOSE THAT SUPPORT THE BASE OF THE RAFTERS.

BENT PLATES: MAJOR HORIZONTAL TIMBERS THAT SUPPORT THE BASE OF THE RAFTERS.

STRAUTS: SHORT TIMBERS PLACED IN A STRUCTURE EITHER DIAGONALLY OR VERTICALLY, DESIGNED TO ACT IN COMPRESSION ALONG THE DIRECTION OF THEIR LENGTH.

KNEE BRACES: A PAIR OF TIMBERS THAT ARE FRAMED DIAGONALLY BETWEEN POSTS AND BEAMS THAT ARE AT RIGHT ANGLES.



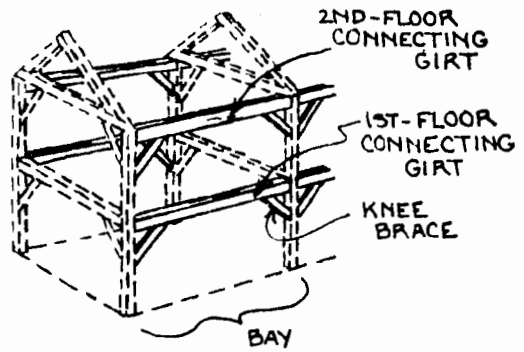
BENT TIMBERS

CONT....

TIMBERS OF THE FRAME..... CONT.

TIMBERS THAT CONNECT BENTS: THESE TIMBERS CONNECT PAIRS OF BENTS TO FORM RIGID BAYS. THEIR DEFINITIONS ARE ANALOGOUS TO THOSE ABOVE.

CONNECTING GIRTS: SEE DEFINITION PREVIOUS PAGE AND DRAWING (RIGHT).
KNEE BRACES: DEFINED PREVIOUS PAGE.

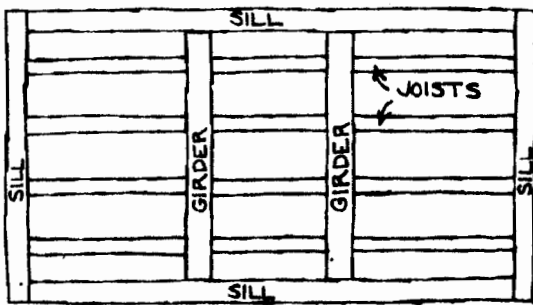


TIMBERS FOR FRAMING FLOORS:

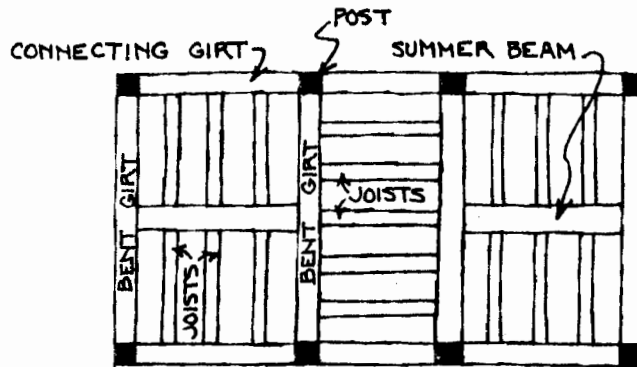
GIRDERS: MAJOR TIMBERS THAT SPAN BETWEEN SILLS.

SUMMER BEAMS: MAJOR TIMBERS THAT SPAN BETWEEN GIRTS OR PLATES.

JOISTS: SMALL, PARALLEL RUNNING TIMBERS THAT COMPLETE THE FLOOR FRAME.



1ST-FLOOR FRAMING



2ND-FLOOR FRAMING

TIMBERS FOR FRAMING ROOFS: A VARIETY OF ROOF TRUSSES WILL BE ILLUSTRATED. THE TIMBERS THAT FORM THESE TRUSSES ARE:

PRINCIPAL RAFTERS: SLOPING TIMBERS OF THE ROOF FRAME JOINED TOGETHER AT THE PEAK AND FRAMED AT THEIR BASE INTO A BENT PLATE.

COMMON RAFTERS: SECONDARY RAFTERS, USUALLY SMALLER THAN PRINCIPAL RAFTERS, LOCATED BETWEEN BENTS.

COLLAR TIE: HORIZONTAL CONNECTOR AT APPROXIMATELY MID-SPAN OF A PAIR OF RAFTERS. IT REDUCES RAFTER SAGGING OR SPREADING.

KING POST: SINGLE VERTICAL TIMBER FRAMED INTO A ROOF TRUSS TO ADD RIGIDITY. RUNS FROM PLATE TO RAFTER PEAK.

QUEEN POSTS: PAIR OF VERTICAL TIMBERS FRAMED INTO A ROOF TRUSS TO ADD RIGIDITY.

PURLINS: HORIZONTAL TIMBERS THAT CONNECT RAFTER TRUSSES.

RIDGE POLE: A HORIZONTAL TIMBER AT THE PEAK OF THE ROOF TO WHICH THE RAFTERS ARE ATTACHED.

KNEE BRACES AND STRUTS: SEE DEFINITIONS, PREVIOUS PAGE.

