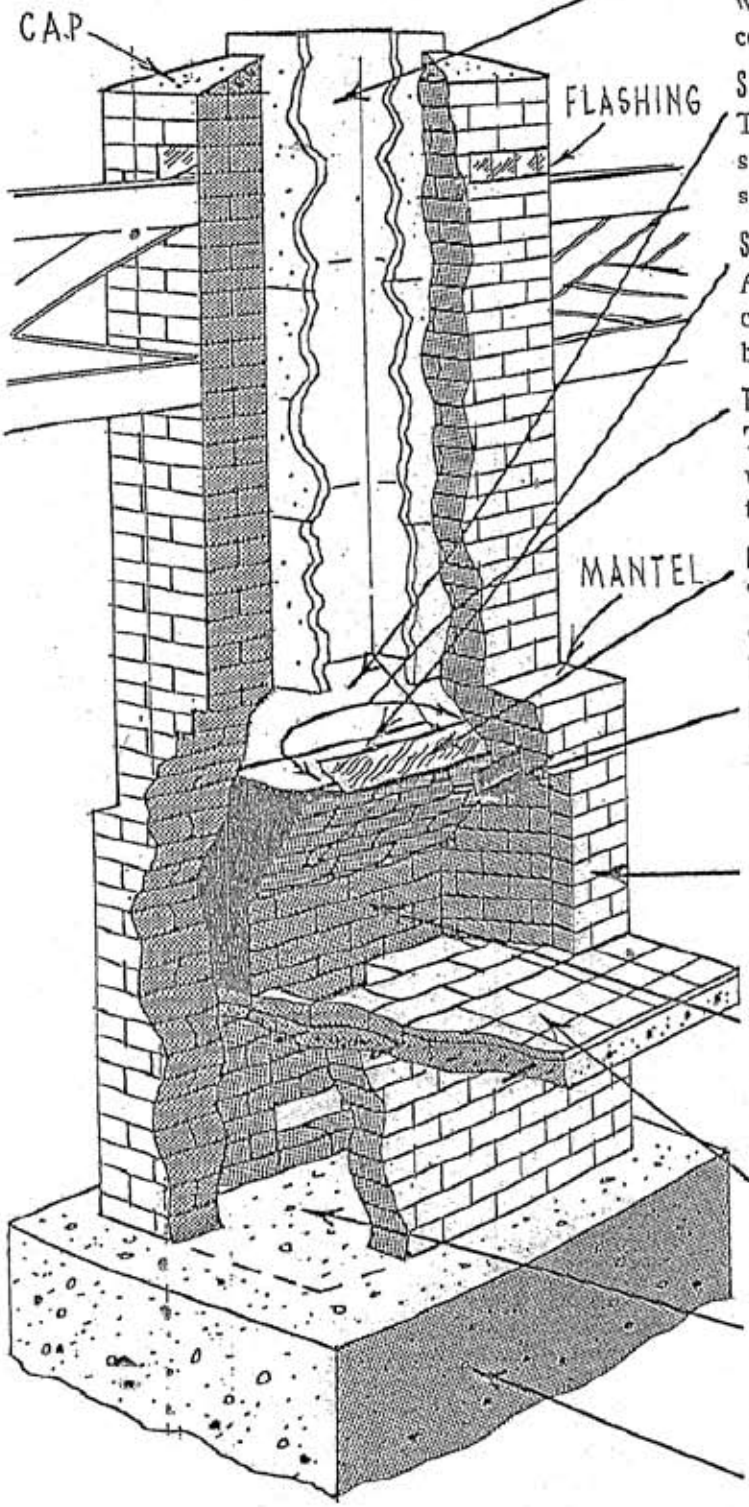
Anatomy of a fireplace



CHIMNEY FLUE
Smoke and combustion gases from the burning wood pass up the chimney inside a flue. Flues usually consist of large-diameter terra cotta pipe.

SMOKE CHAMBER
The smoke chamber acts as a funnel to compress the smoke and gases rising from the fire so they will squeeze into the chimney flue above.

SMOKE SHELF
A smoke shelf bounces stray downdrafts back up the chimney before they can neutralize the updraft and blow smoke into the room.

THROAT
The throat is a slot-like opening above the firebox, where flame, smoke, and combustion gases pass into the smoke chamber. It is usually fitted with a damper.

DAMPER
The damper is a steel or cast iron door that opens or closes the throat opening. Used to check and regulate draft, it prevents loss of heat up the chimney.

LINTEL
The lintel is a heavy steel brace that supports the masonry above the fireplace opening. Sometimes, it is incorporated in the damper assembly.

FACE
The masonry surrounding the fireplace opening is known as the fireplace "face." It may be built of various materials: brick, stone, concrete, tile, wood.

FIREBOX
The chamber where the fire is built is made of fire-resistant brick. Walls and back are slanted slightly to radiate heat out into the room.

HEARTH
Inner hearth of fire-resistant brick holds the burning fuel; outer hearth of tile, brick, etc., protects house flooring from heat, sparks. Supported by subhearth.

ASH PIT
Ashes are dumped through an opening in the hearth into the fireproof storage compartment below. Many fireplaces today are built without ash pits.

FOUNDATION
The fireplace and chimney structure has its own foundation. The concentrated weight of the masonry is usually carried by a reinforced concrete slab.