

*Here's how to "Jump" an*

**AMERICAN**

STEEL  
ERECTORS

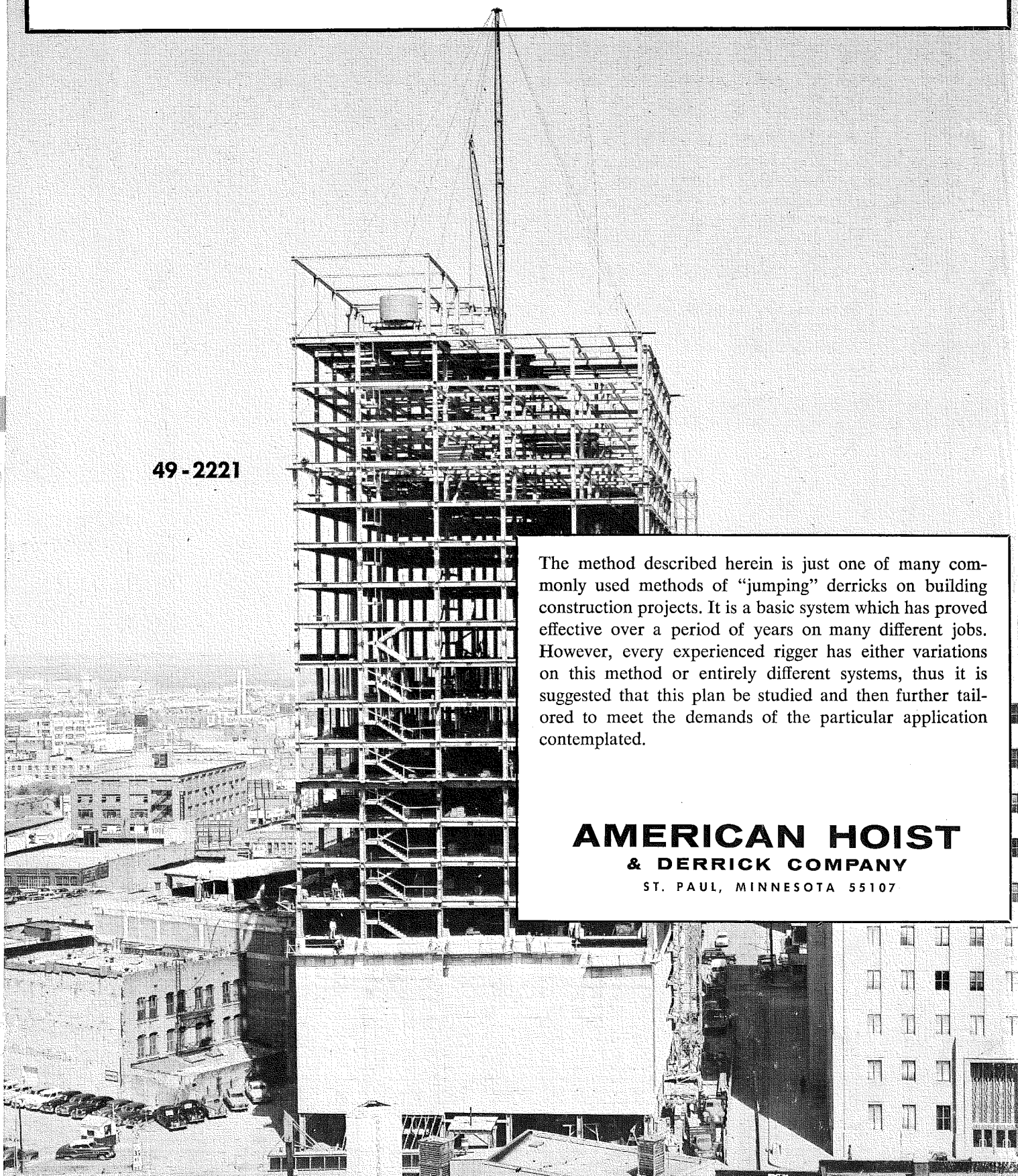
**GUY DERRICK**

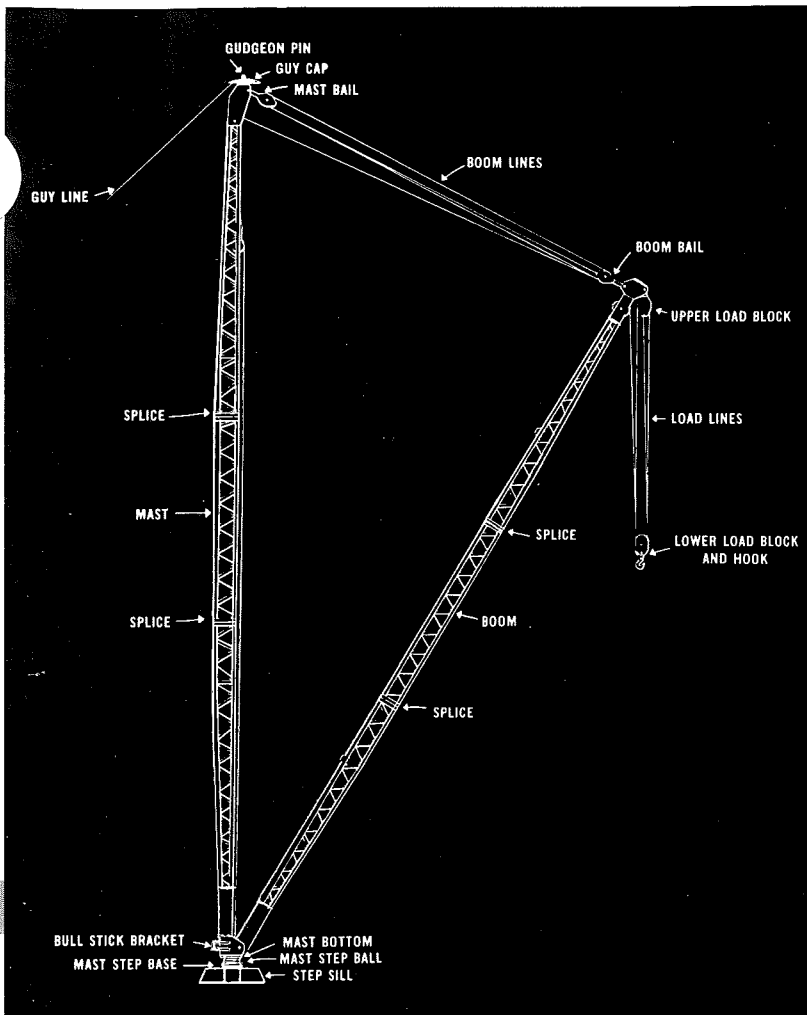
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The method described herein is just one of many commonly used methods of "jumping" derricks on building construction projects. It is a basic system which has proved effective over a period of years on many different jobs. However, every experienced rigger has either variations on this method or entirely different systems, thus it is suggested that this plan be studied and then further tailored to meet the demands of the particular application contemplated.

**AMERICAN HOIST  
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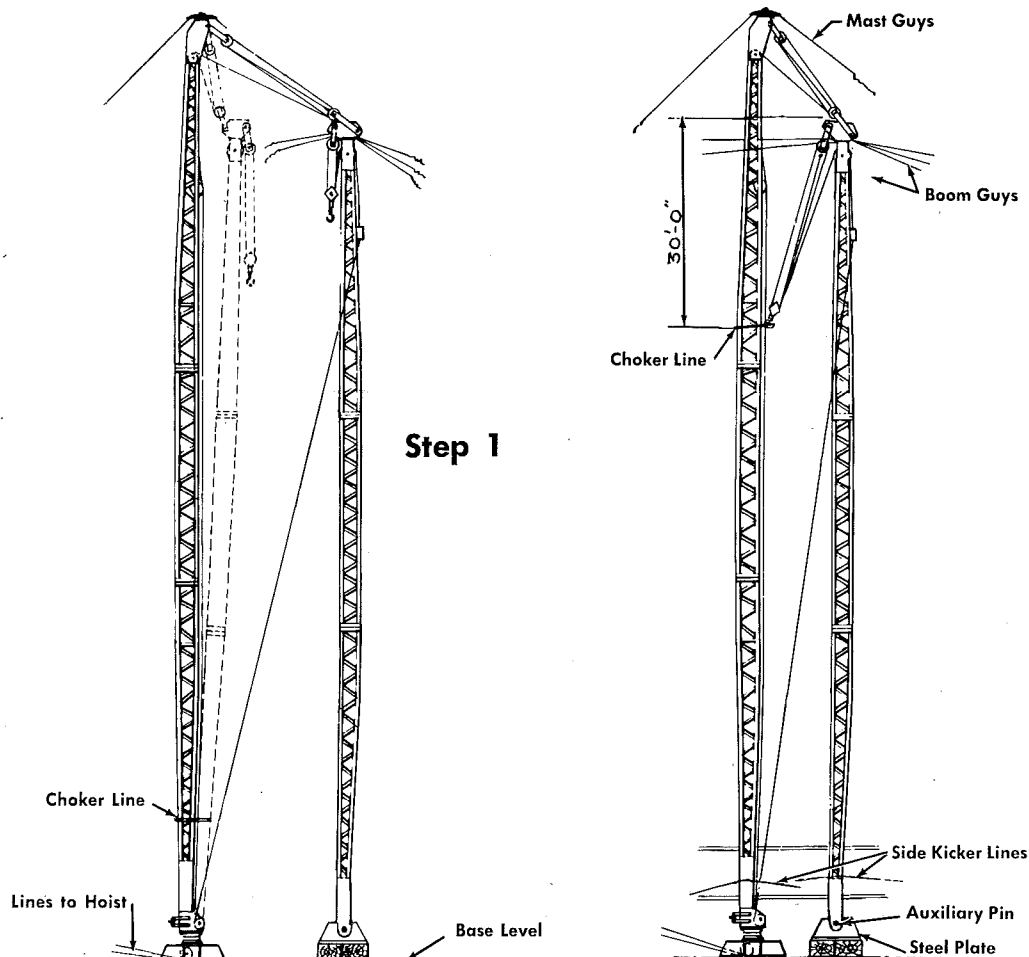


THE "JUMPING" PROCESS is broken into three basic steps as explained in the following paragraphs. There are several pointers to remember before beginning which may save the inexperienced rigger much time and effort as the system is followed:

1. The boom and hoist lines do not need to be unriggered when making the "jump."
2. For every move, a base, or grillage, must be arranged on the new level. This grillage of steel beams will become the working base for the derrick at each new level.
3. A base plate is provided by the steel erector and attached to timbers to support the boom during moving operations. An auxiliary pin of the same diameter as the boom seat pin must be provided by the steel erector.
4. The hoist and step sill always remain at the base level.

### Step 1 Separating Boom and Mast

- Attach 5 guy lines to the boom point, allowing them to hang loose.
- Pull boom close to the mast, adding a choker line around boom and lower mast to keep mast and boom close together.



- Raise boom gently with boom lines, just sufficient to relieve the weight on the boom seat pin, which is then removed with the sheaves. The boom will then be suspended by the boom lines.
- Remove choker line and rotate the boom 180° manually so the block will be toward the mast. Swing the lower end of the boom over the steel base plate which should be kept as close to the mast as possible.
- Pin connect the boom to the steel base plate by using the auxiliary pin.
- Secure the lower end of the boom by adding side-kicker lines fastened to the building frame.
- Tighten 5 boom guy lines to pull the boom to a vertical position. Two of the lines should lead past the mast, one on each side, and the other three splayed out in the opposite direction.

## Step 2 Raising the Mast to the New Level

- Hook hoist block to the choker line around the mast 30' below the boom tip (for a two floor jump).
- Keep hook line sufficiently taut without pulling upward until step bolts are removed.
- Place kicker lines around lower mast to prevent mast slippage when step bolts are removed.
- Disconnect step casting from step sill, and detach kicker lines.
- Detach mast guy lines from building, but NOT from the guy cap.
- Raise mast with load line to new level and skid grillage under mast step framing.

- When mast is in position shown, fasten mast guy lines to the building frame and pull mast to a vertical position.
- Unhook load line from mast choker line.

## Step 3 Raising the Boom to the New Level

- Take slack out of boom lines to hold the boom firm, THEN unfasten the boom guy lines.
- Gently raise boom and temporary base by means of the boom lines, ONLY AS FAR AS NECESSARY TO ROTATE THE BOOM back to normal position, freeing twist in boom lines for continued lifting.
- Raise the boom to new level and rest on framework in front of the mast.
- Remove boom seat pin with sheaves from lower mast, and remove auxiliary pin connecting boom to steel plate.
- Gently raise boom enough to pull lower end of boom toward mast.
- Reassemble boom bottom to mast by inserting boom seat pin and sheaves. Choker line may be used to pull boom and mast together to ease lower boom pin assembly.
- Lower boom to working position and "jump" is complete.

**NOTE:** Because it is impossible for American Hoist & Derrick Company or its personnel to control all local factors effecting the success of the methods described herein, the Company assumes no liability whatsoever concerning its use.

