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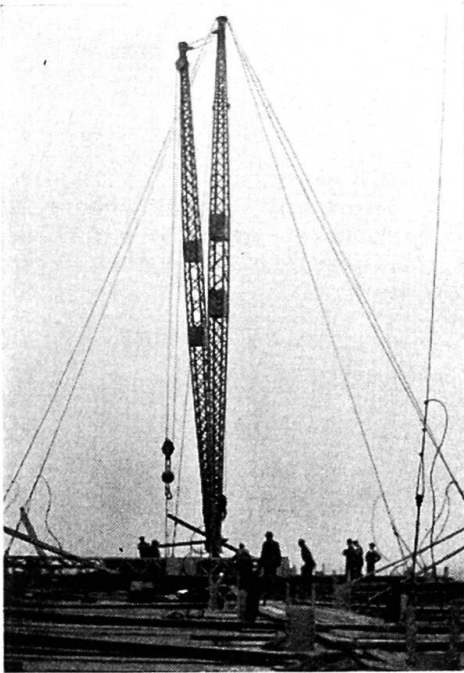
Erection and Accident Prevention on Tier Buildings *)

Méthodes de montage pour les ossatures métalliques des bâtiments à étages multiples

Montage-Verfahren bei großen Stockwerkrahmen aus Stahl

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1

Fig. 1. Guy derrick consists essentially of boom, mast, falls for raising or lowering boom and load, and guys to hold mast upright.



2

Fig. 2. An unloading or sorting yard is necessary for most efficient tier building erection.



3

Fig. 3. A ramp is often needed at the site when foundation is considerably below ground level.

*) Supplement to "Preliminary Publication" IIIc1, page 539.



Fig. 4. Use of a crane is advisable to unload tools and equipment, and then to assemble and set up guy derrick.

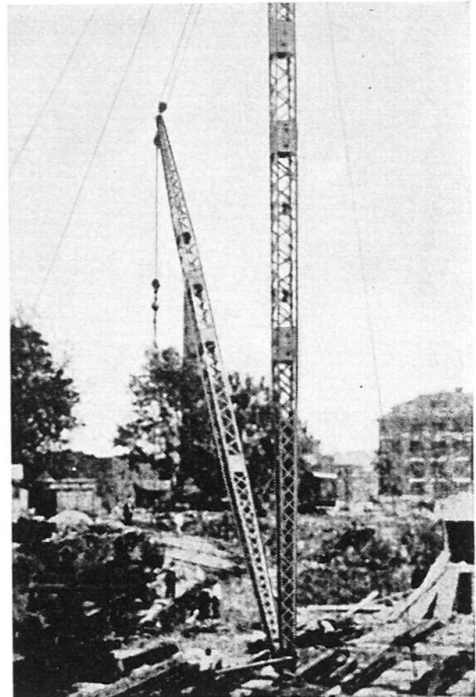


Fig. 5. As steel is delivered, derricks distribute the individual pieces safely about the area, beneath their final locations in the structure.

Fig. 6. Tiers are usually two floors but the top tier can be three floors to eliminate one derrick jump.

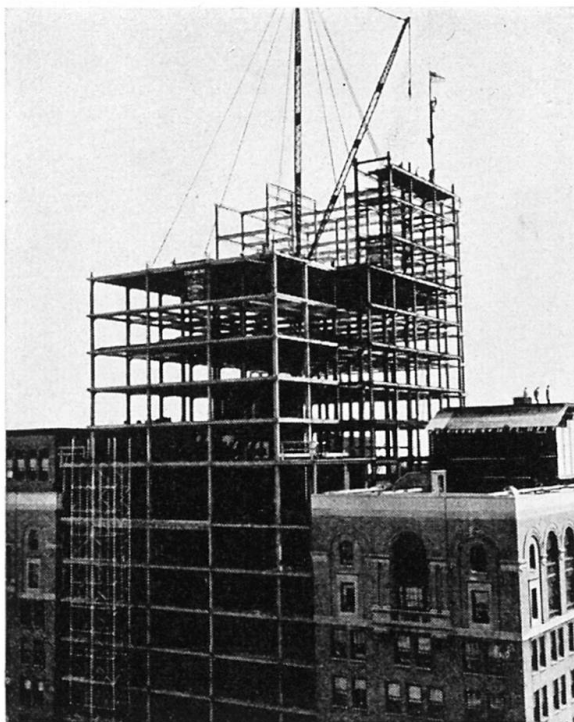
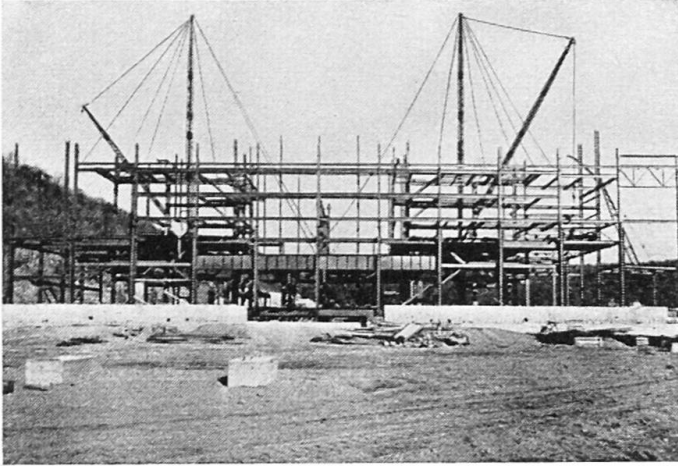
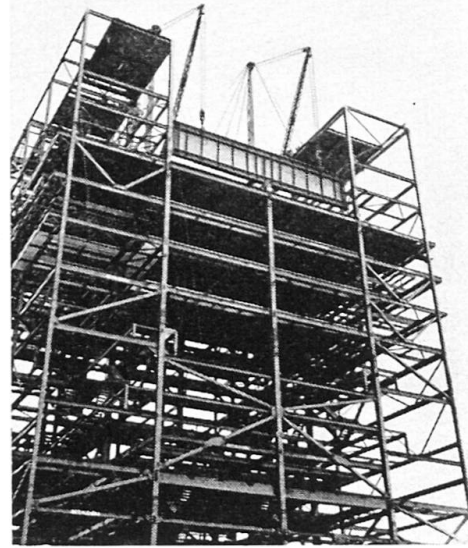


Fig. 7. To jump guy derrick, boom is separated from mast, guyed as a pole to lift mast to upper floor. Mast then picks boom up to itself.





8



9

Fig. 8. Two smaller guy derricks are often more efficient for a large area than one derrick with longer boom and mast.

Fig. 9. Two lighter capacity derricks together can pick a few heavy pieces and erect the balance of the structure more efficiently than one, heavy rig.

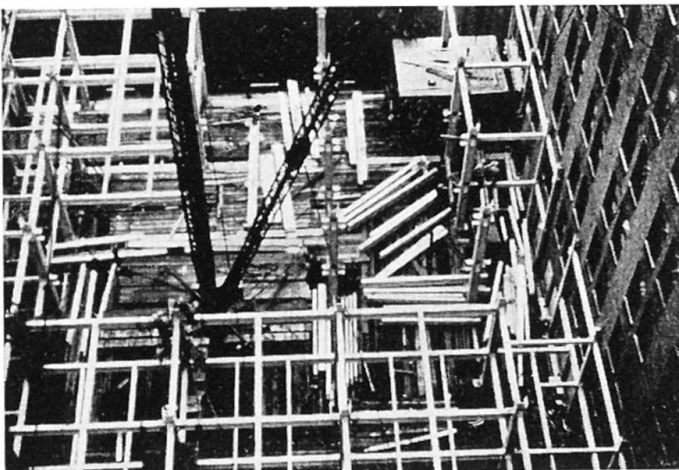
Fig. 10. Erecting trusses completely assembled on the working floor, eliminates falsework.

Fig. 11. Steel is erected from the perimeter in towards the derrick which is then jumped to the top of the last steel erected.

10



11



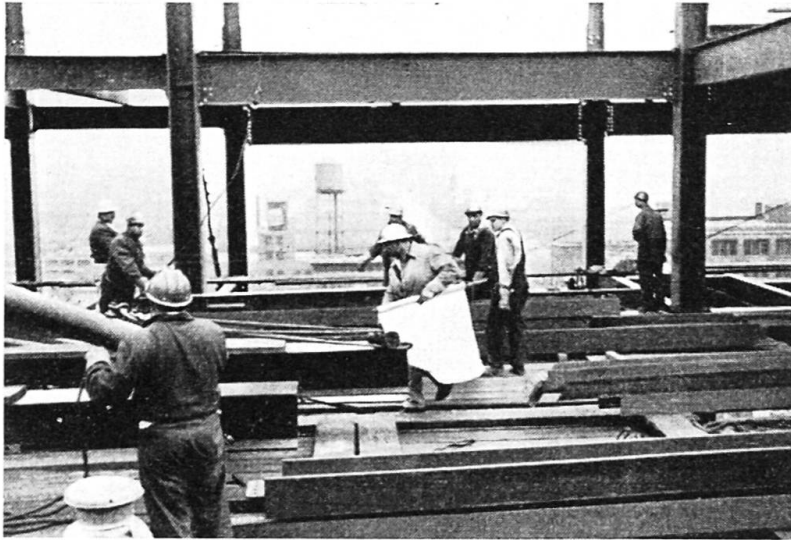


Fig. 12. A clearly drawn, uncomplicated erection diagram aids in safe, efficient, economical erection.



Fig. 13. With several derricks erecting, staggering the time of jumping results in better delivery of steel. Working floors should be completely planked for safety.



Fig. 14. Stiffleg derricks are sometimes used as travelers to erect heavy steel below street level, then setting up guy derricks for the upper, lighter structure.

Fig. 15. With guy derricks, entire floors are available for constructing walls and floors close behind the erectors.

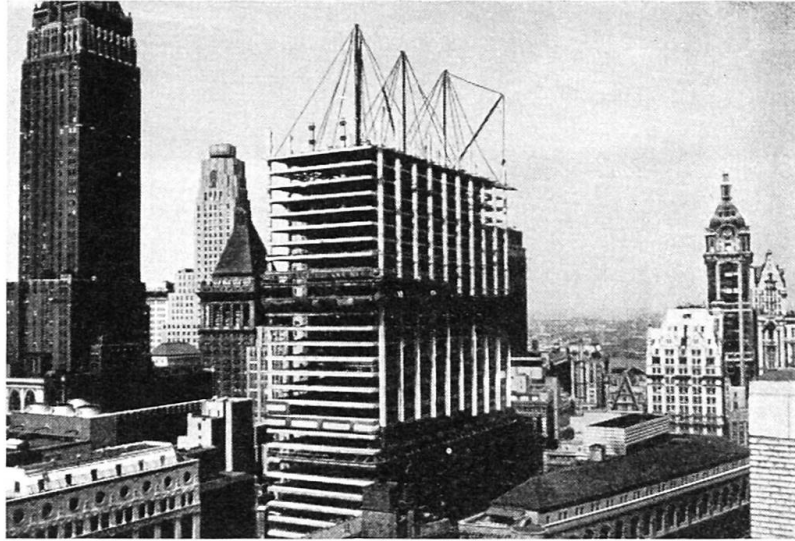


Fig. 16. Low tier-buildings are sometimes erected with crawler cranes or truck cranes.

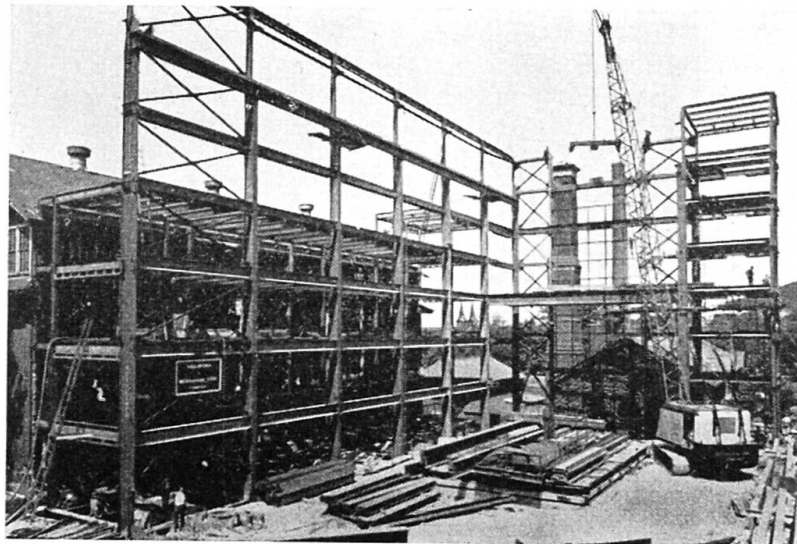


Fig. 17. Safety meetings should be held regularly, and safe operations result in efficient and economical production.





Fig. 18. Safety Codes and posters — serious or humorous — remind the men to work safely.

Summary

Photographs are presented to illustrate and clarify original paper to show erection practices on large steel-framed tier buildings.

Résumé

Les présentes photographies illustrent la contribution parue dans la «Publication préliminaire»; elles montrent des procédés de montage pour les ossatures métalliques des bâtiments à étages multiples.

Zusammenfassung

Die vorgelegten Photographien, die den ursprünglichen Beitrag illustrieren und veranschaulichen sollen, zeigen Montage-Verfahren bei großen Stockwerkrahmen aus Stahl.