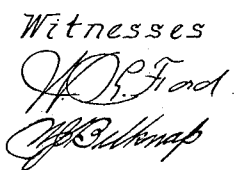


1,040,423.

2 SHEETS-SHEET 1.



Inventor
Clinton W. Russell

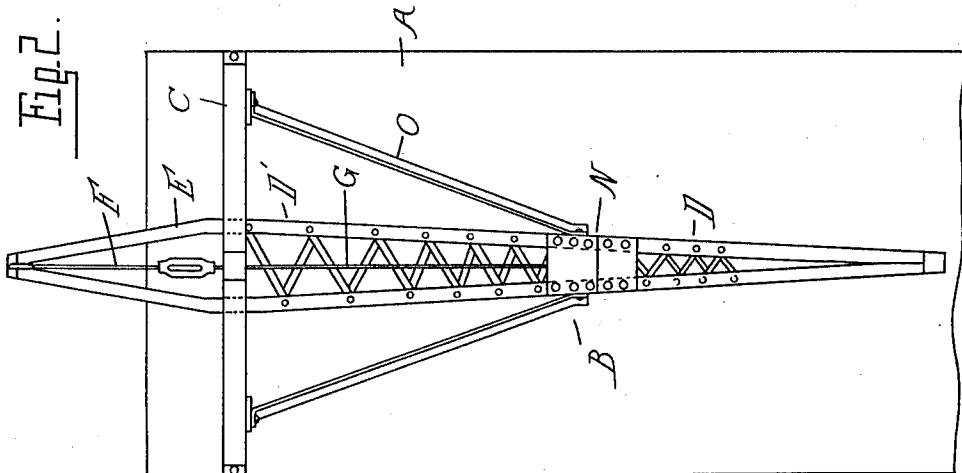
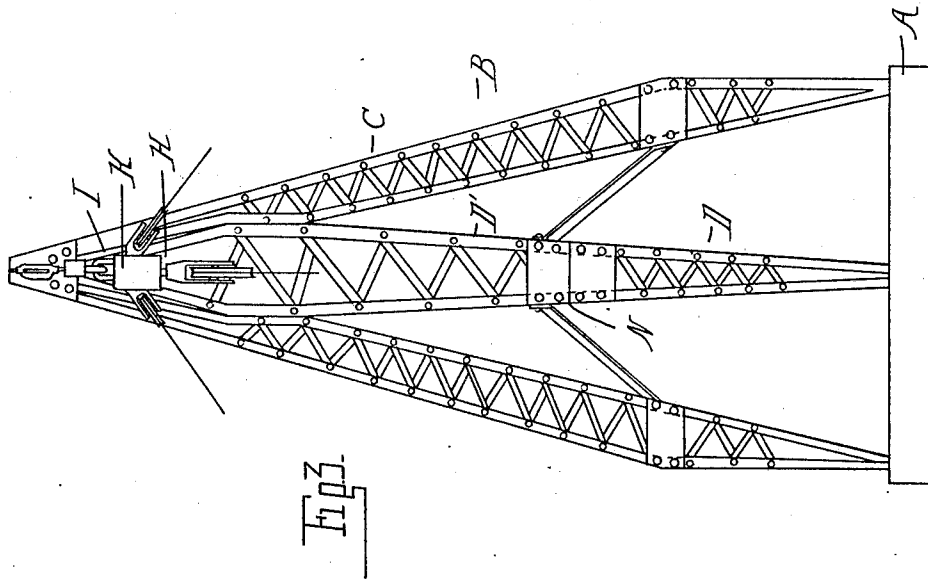
By Whittemore Hulbert + Whittemore
Atty's

C. W. RUSSELL.
 LOGGING APPARATUS.
 APPLICATION FILED JULY 23, 1910.

1,040,423.

Patented Oct. 8, 1912.

2 SHEETS-SHEET 2.



Witnesses
W. H. Ford
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 Clinton W. Russell
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UNITED STATES PATENT OFFICE.

CLINTON W. RUSSELL, OF DETROIT, MICHIGAN.

LOGGING APPARATUS.

Specification of Letters Patent.

Patented Oct. 8, 1912.

1,040,423.

Application filed July 23, 1910. Serial No. 573,423.

To all whom it may concern:

Be it known that I, CLINTON W. RUSSELL, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Logging Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to logging apparatus of the type in which the log-loading and log-hauling devices are mounted upon the same platform.

The invention consists in the peculiar construction of the frame as more fully herein-after set forth.

In the drawings,—Figure 1 is a side elevation of the machine; Fig. 2 is a plan view thereof; and Fig. 3 is a front elevation. Fig. 4 is a perspective view illustrating the angular frame.

A is a platform or base frame, B is a derrick mounted thereon which is of tripod form. This frame B is composed of a forward A-frame C arranged in substantially a vertical plane and a rearwardly inclined member D. To support the hauling blocks so as to provide clearance for the lines running thereto, the inclined member D is extended between the legs of the A-frame and forward thereof to form an over-hanging portion E. This over-hanging is guyed at F to the apex of the A-frame, and the latter is secured by a guy G inclining rearwardly and preferably attaching to the member D.

The blocks H through which the hauling lines pass, are mounted upon a pivotal frame I preferably of angular form which is supported from the over-hanging portion E of the member D. This frame I comprises a lower rigid member J and an upwardly extending member K provided with a spring M forming a yieldable connection.

The member D instead of inclining in a straight line from the over-hanging portion E to the platform, is preferably formed to have two portions of different inclinations, the upper portion D' of which the over-hang E is a portion, extending to a point N at a more gradual inclination than the lower portion D². Diagonal braces O connect the point N with a lower point upon the A-frame and inclined brace P extends from the latter point to the frame A.

With the construction shown, the principal stresses to which the derrick is subjected

are transmitted through the inclined member D into the A-frame and into the platform. The member D is of a form departing from the point N to its upper and outer end and also departing from said point N and the base.

What I claim as my invention is:

1. In a logging apparatus, the combination with a base frame, of a tripod derrick mounted thereon, one of the members of said tripod extending forward beyond its point of connection to the other members, and a hauling block secured to said forwardly projecting portion.

2. In a logging apparatus, the combination with a base frame, of a tripod derrick mounted thereon comprising a forward A-frame and an inclined member secured to and crossing said A-frame below its apex to form a forwardly extending over-hanging portion, and a hauling block secured to said forwardly projecting over-hanging portion.

3. In a logging apparatus, the combination with a base frame, of a tripod derrick mounted thereon comprising a forward A-frame, an inclined member secured to and crossing said A-frame at a point below its apex to form an over-hanging portion, and a pivotal block supporting member depending from said over-hanging portion.

4. In a logging apparatus, the combination with a base frame, of a tripod derrick mounted thereon comprising a forward A-frame and an inclined member connected to and crossing said A-frame at a point below its apex constituting an over-hanging portion, and a guy extending from the end of said over-hanging portion to the apex of the A-frame.

5. In a logging apparatus, the combination with a base platform, of a tripod derrick mounted thereon comprising a forward A-frame and an inclined member connected to and projecting forward of said A-frame at a point below its apex, a guy connecting the projecting end of said inclined member with the apex of the A-frame and another guy connecting said apex and said inclined member on the opposite side of said A-frame.

6. In a logging apparatus, the combination with a base frame, of a derrick mounted thereon having a projecting upwardly inclined member, an angular frame pivotally connected to said inclined member, and hauling blocks secured to said pivoted frame.

7. In a logging apparatus, the combina-

tion with a base frame, of a derrick mounted thereon including an inclined member extending from said base frame and having a forwardly projecting over-hanging portion, and a frame pivotally connected to said over-hanging portion comprising a laterally extending rigid member and an upwardly extending yieldable member.

8. In a logging apparatus, the combination with a base frame, of a derrick mounted thereon including an inclined member having a forwardly projecting over-hanging

portion, an angular frame pivotally secured to said over-hanging portion and comprising a laterally extending rigid portion and an upwardly extending link, and a resilient yieldable connection between said link in said rigid member.

In testimony whereof I affix my signature in presence of two witnesses.

CLINTON W. RUSSELL.

Witnesses:

HERBERT N. NIGG,
ROY A. MITCHELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."