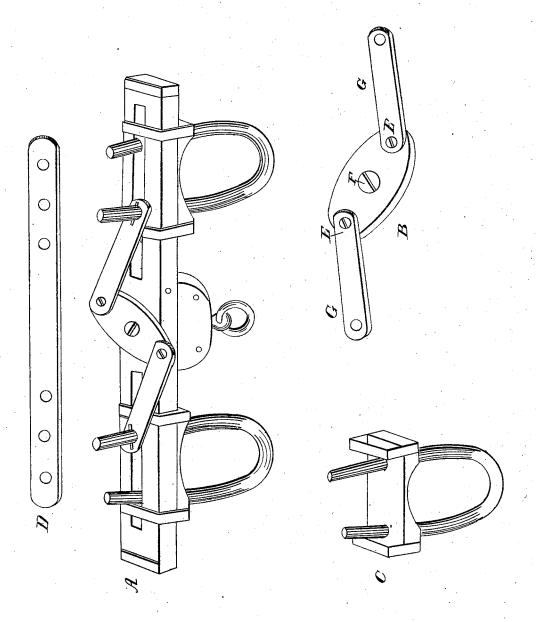
## D. CHAPPEL.

0x-Yoke.

No 4,733.

Patented Sept. 3, 1846.



Inventor: David Chappel

## NITED STATES PATENT OFFICE.

DAVID CHAPPEL, OF SHELDON, VERMONT.

## OX-YOKE.

Specification of Letters Patent No. 4,733, dated September 3, 1846.

To all whom it may concern:

Be it known that I, DAVID CHAPPEL, of Sheldon, in the county of Franklin and State of Vermont, have invented a new and useful Yoke for Working Oxen; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making 10 a part of this specification, in which-

"A" represents a perspective view of the

ox-yoke. "B" represents the movable-self-regulator, formed of three pieces of wood fastened together by bolts [E, E,] but moving freely in a horizontal direction on said bolts; the middle piece, or block being attached to the center of the yoke, on the top of the yoke by a bolt ("F,") and moving freely in a horizontal direction on said bolt. The outer pieces ("G," "G,") being attached by their extreme ends to the inner end of each bow, and moving in a horizontal direction on said bows.
"C" represents one bow and sliding-

block (detached from the yoke) with iron bands by means of which it slides over the main beam of the yoke, moving freely on the beam, while the bow moves longitudi-30 nally in the mortise as shown in the perspective view ("A"). The mortise is cut entirely through the beam. The object of this construction of yoke is to prevent what is technically called "crowding" and "haul-35 ing "—a difficulty very common and per-plexing in working oxen, and its operation to prevent those difficulties is as follows:— If one of the oxen attempts to "crowd," instead of pushing the other out of the path, he can only move the block which contains

his own bow toward the center of the yoke, bringing his fellow, by the act, the same distance toward the center as himself. For the outer pieces of the regulator being of l

equal length, and the middle piece being at- 45 tached to the yoke in its center, and in the center of the yoke, the bows, consequently must always be equidistant from the center of the yoke. If one of the oxen attempts to "haul," he will be obliged to move his fel- 50 low an equal distance with himself away from the center of the yoke-instead of pulling his fellow along with himself-or instead of compelling his fellow (as is the case in the common, fixed yoke) to struggle 55 against the efforts of his antagonist. In short, by the moving of the regulator, whatever advantage one ox takes (either by pushing or pulling) he is compelled at the same moment to give his mate.

"D" represents a piece of wood called a "gage" having three holes at each end in which to insert the bows. When you wish to fix them at any given distance from the center of the yoke. As for instance 65 in plowing the width of the furrow, may be governed by increasing or diminishing the distance of the bows from the center of the yoke. By the application of this "gage," the regulator ceases to operate, 70 and the bows are fixed—and the yoke becomes like the common one in its working.

What I claim as my invention, and wish to secure by Letters Patent, is-

The sliding block marked "C," which 75 moves on the beam, the bow passing through the block, and moving in the mortise of the beam. And also the movable regulator "B," attached by a bolt on the top of the yoke at the center; and also, in combination 80 with the above, the "gage" marked "D," to be placed on the top of the bows at pleasure, and operating as before described.

## DAVID CHAPPEL.

In presence of— JOHN G. SAX, H. S. REEYCE.