No. 615,492. Patented Dec. 6, 1898.

K. OSEL.

DOOR HANGER.

(Application filed June 25, 1897.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2.

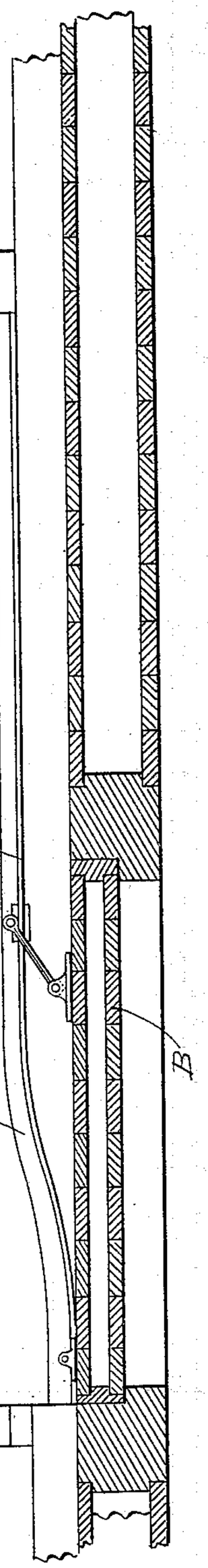

Fig. 1.

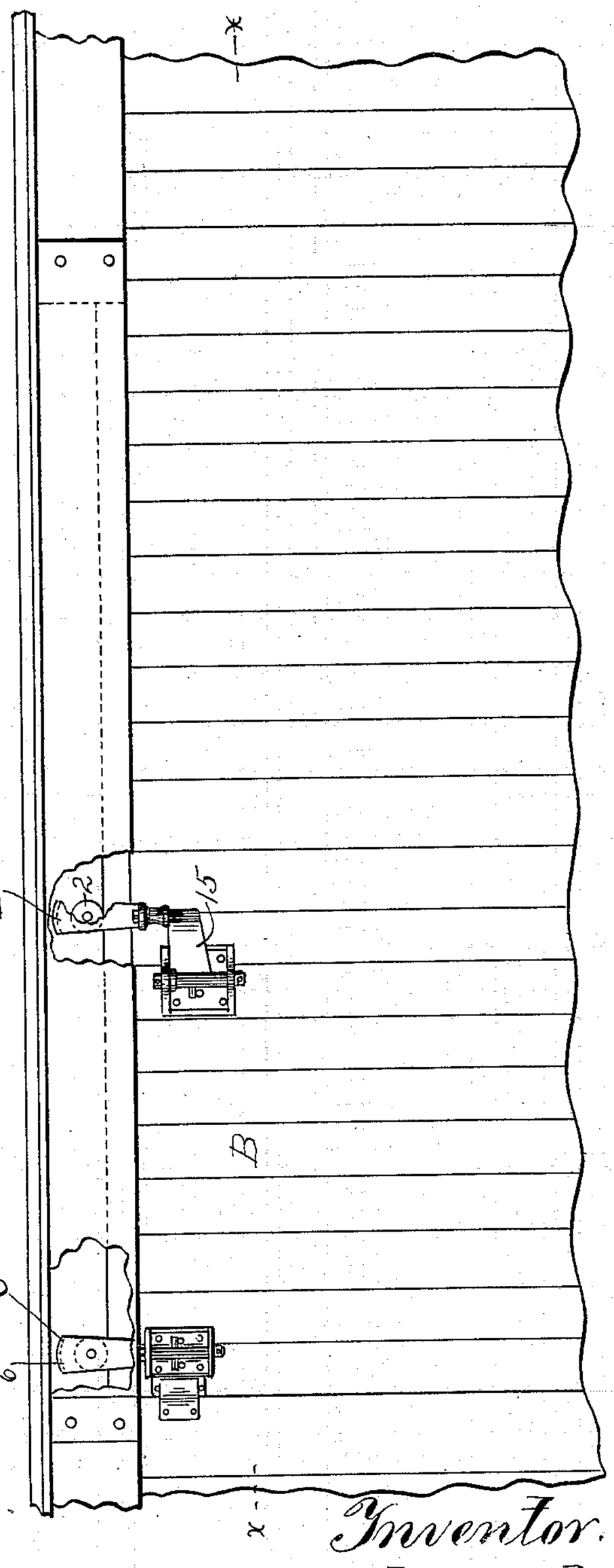

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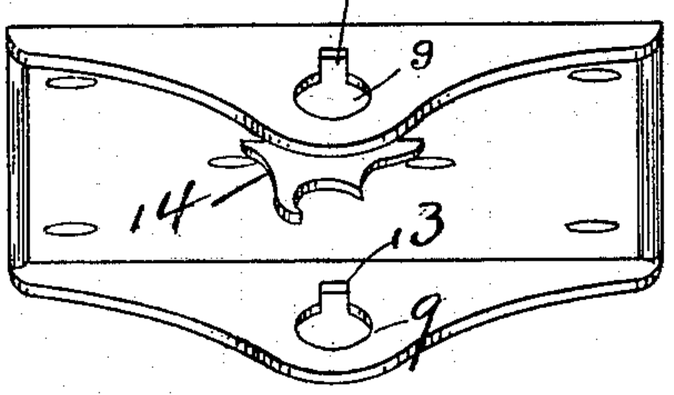
Fig. 4.



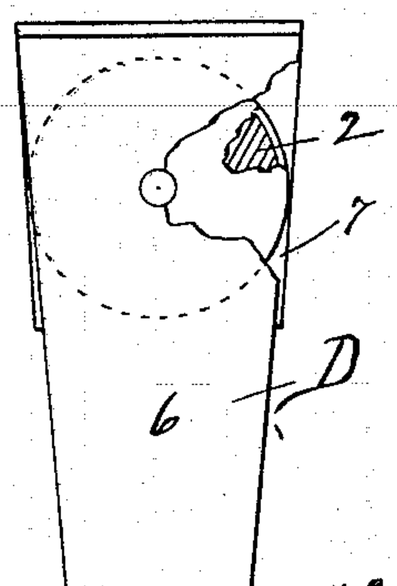


Fig. 5.

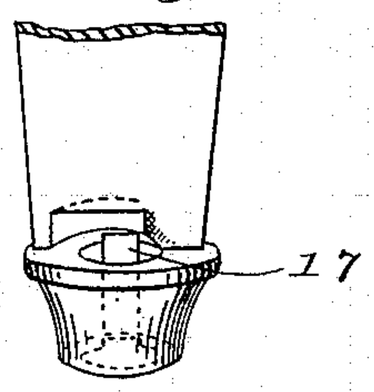
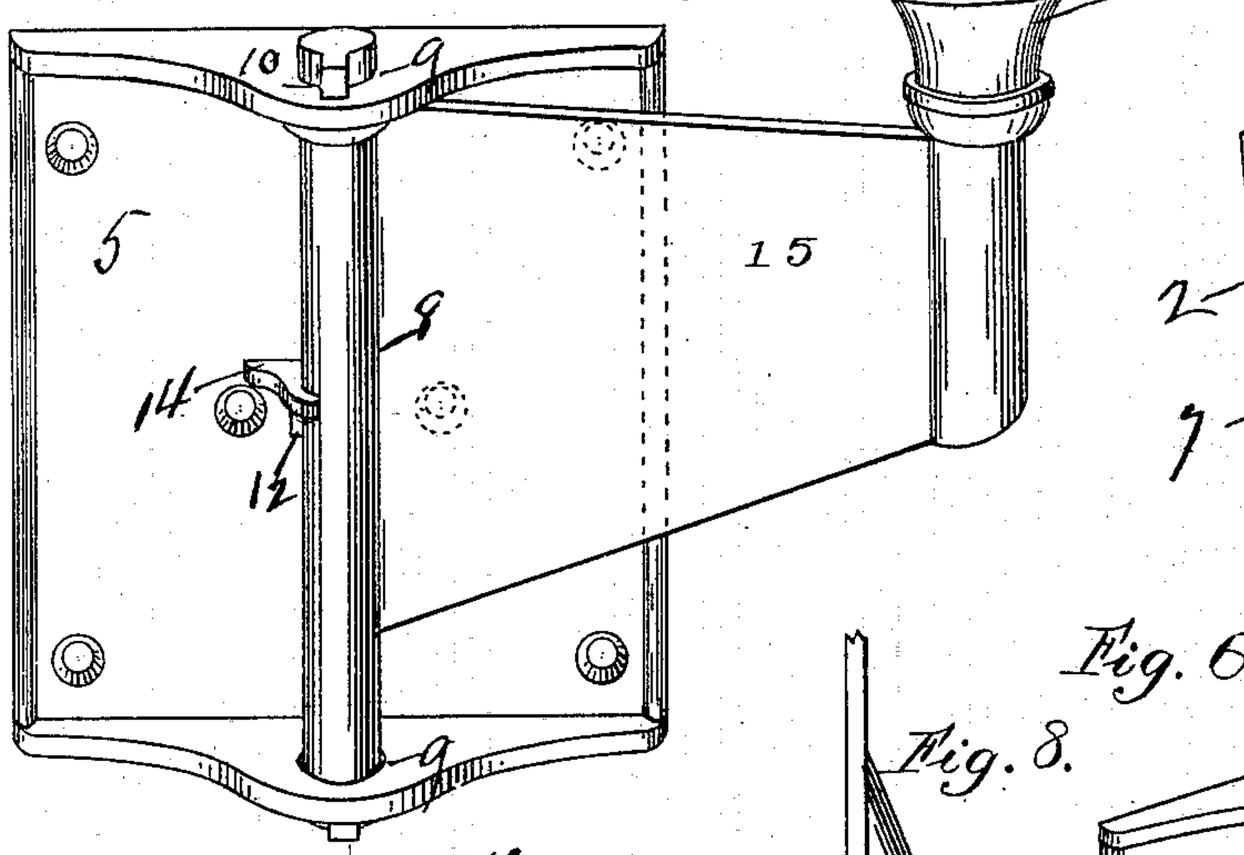


Fig. 3.



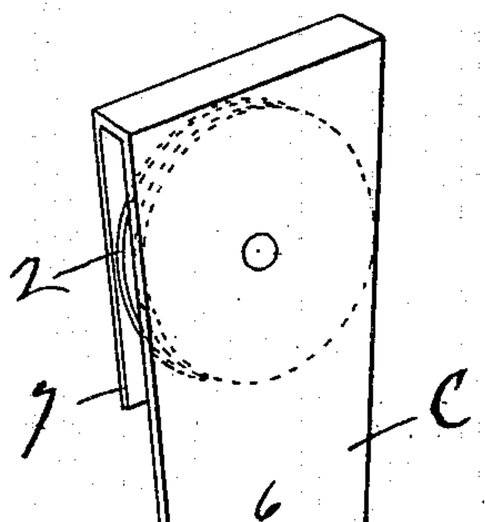


Fig. 6.

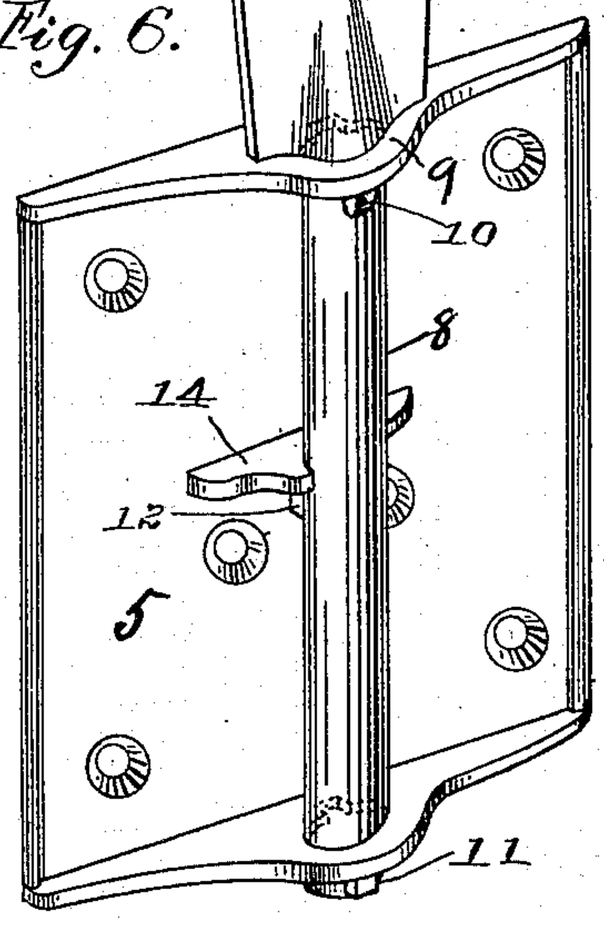


Fig. 8.

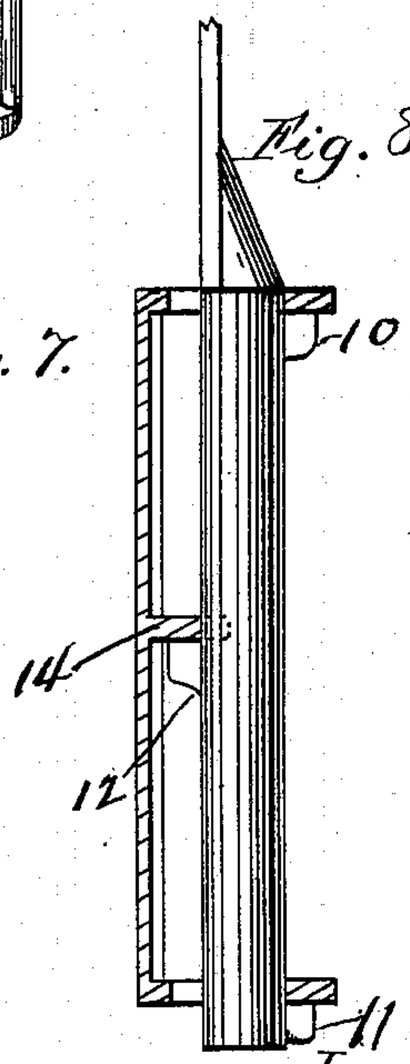
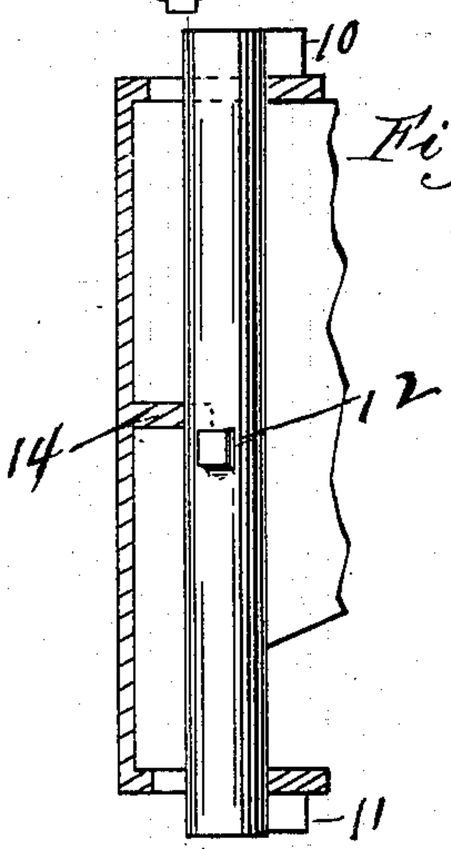


Fig. 7.



Witnesses:

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UNITED STATES PATENT OFFICE.

KISTEL OSEL, OF ST. PAUL, MINNESOTA.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 615,492, dated December 6, 1898.

Application filed June 25, 1897. Serial No. 642,249. (No model.)

To all whom it may concern:

Be it known that I, KISTEL OSEL, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Door-Hangers, of which the following is a specification.

My invention relates to improvements in door-hangers, its object being principally to provide an improved form of hanger for the same having detachable hinge connection with the door to allow of easy detachment, and also consists in the other improved features of construction hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a partial side elevation of the car, showing the car-door in closed position. Fig. 2 is a longitudinal cross-section on line *x x* of Fig. 1. Fig. 3 is a detail of one of the supporting-hangers for the door, and Figs. 4 and 5 are details of portions of said hanger. Fig. 6 is a detail of the other hanger for the door. Fig. 7 is a sectional detail of a portion of the hanger shown in Fig. 3, and Fig. 8 is a sectional detail of a portion of the hanger shown in Fig. 6.

In the drawings, A represents the car, and B the side door thereof. The door is supported by means of the hangers C and D, provided with carrying-wheels 2, running upon the horizontal rail 3, secured in the side of the groove 4 underneath the overhanging roof of the car. This rail spans the door-opening and extends beyond said opening a distance equal to the width of the door to support the same in open position.

The hanger C consists of the trolley-arm 6, having journaled in its upper end the wheel 2, adapted to run upon the rail 3, the trolley-arm being provided with a downwardly-projecting extension 7 to prevent derailment. The trolley-arm is connected with the door by means of the bracket 5, having outwardly-projecting flanges provided with perforations 9, through which the spindle 8 of the bracket-arm passes. In order to lock the trolley-arm in the bracket, I preferably form upon the spindle 8 lateral projections 10 and 11 upon one side and upon the opposite side of the spindle a projection 12. The openings 9 in the top and bottom flanges of the bracket are formed with rearwardly-extending slots 13, through which the projections 10 and 11 are adapted to pass in fitting the parts together, the bracket being formed with a central rib 14 to engage the extension 12 when the parts are fitted together in the position shown in Fig. 6.

The manner in which the parts are fitted together will be readily understood from the drawings. The spindle is first inserted through the opening 9 in the top of the bracket until the projection 11 comes in contact with the rib 14. The trolley-arm is then turned to carry the projection 11 out of contact with said rib and allow the projection 12 to be carried through the opening until that projection comes in contact with the rib. The trolley-arm is then again turned to carry the projection 12 out of contact with the rib and allow the projections 10 and 11 to pass through the openings 9, the trolley-arm then being turned to bring the projection 12 against the lower side of the rib 14 and the projections 10 and 11 in bearing contact with the top and bottom flanges of the bracket. The parts are adapted to be detached by the reverse operation when desired.

The hanger D is provided with a hinge member 15, interposed between the trolley-arm and bracket, permitting the door to receive a lateral sliding movement to carry it outside of the body of the car into open position. The hinge member 15 has a detachable connection with the bracket similar to that shown between the trolley-arm and bracket of the hanger C. The connection between the trolley-arm and member 15 consists of a spindle 16, passing through an opening 17 in the lower end of the trolley-arm 6 and adapted to be locked in place by means of the lateral projection 18, as shown in Fig. 3. The part of the rail 3 which carries the hanger C when the door is closed is even with the outside of the hanger, as shown in Fig. 2, while the part which carries the hanger D is beyond the face of the door a distance equal to the width thereof. Thus as the door is carried to open position the hinge member 15 of the hanger D will turn in the trolley-arm 6 and the bracket 5 to conform to the position of the rail.

I claim—

1. A double-hinge door-hanger comprising in combination, the door-bracket, the trolley-

arm and the intermediate arm having detachable pintle connection with both bracket and trolley-arm, substantially as and for the purposes specified.

2. In a door-hanger, the combination of the door-bracket, the trolley-arm, the interposed hinge member and the pintle at each end thereof adapted to be fitted to bearings or eyes in the bracket and trolley-arm respectively, and having lateral lugs adapted to slip through notches in said eyes in connecting or disconnecting the parts, whereby the parts are normally locked into pivotal engagement, but may be readily disconnected, substantially as and for the purposes specified.

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

KISTEL OSEL.

Witnesses:

T. D. MERWIN,

MINNIE L. THAUWALD.