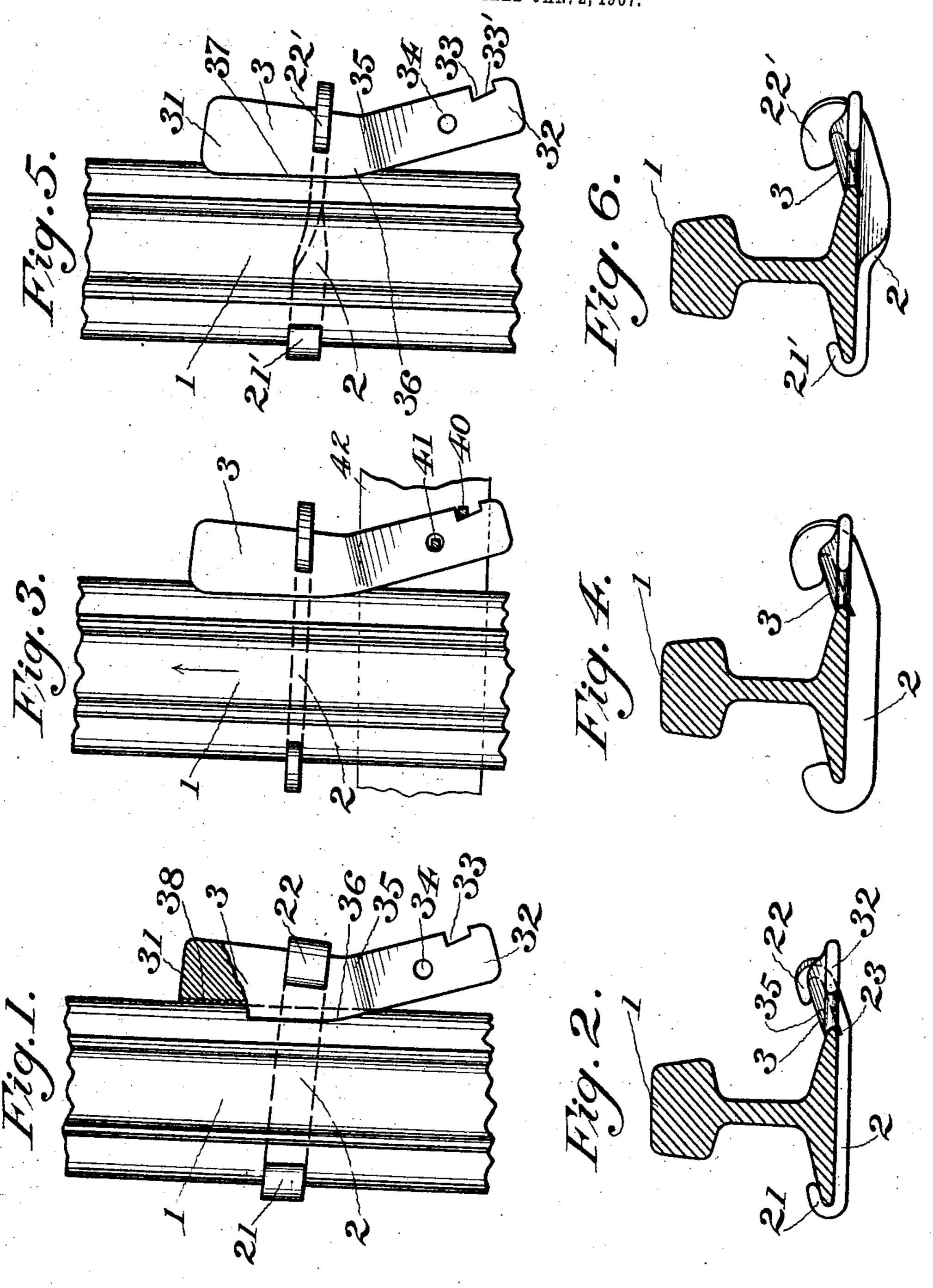
## N. E. SALSICH. RAIL ANTICREEPER.

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## UNITED STATES PATENT OFFICE.

NEIL E. SALSICH- OF HARTLAND, WISCONSIN.

## RAIL-ANTICREEPER.

No. 854,435.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed January 2, 1907. Serial No. 350,439.

To all whom it may concern:

Be it known that I, Neil E. Salsich, a citizen of the United States of America, and a resident of Hartland, county of Waukesha, 5 and State of Wisconsin, have invented new and useful Improvements in Rail-Anticreepers, of which the following is a specification.

My invention pertains to means for the prevention of creeping of railway rails.

On double-track railways, where the traffic on each track is always in the same direction, the creeping of the rails in the direction of the traffic becomes of such magnitude as to require means for prevention; the same is 15 true of rails on heavy grades, where the tendency of the rail is to creep down the grade.

I provide a simple and adjustable clamp for the rail, with means for anchoring the clamp to the tie, thus preventing the move-20 ment of the rail over the tie.

This description is accompanied by six figures, in which

Figure 1 shows a type of my device; Fig. 2 shows end view of Fig. 1; Fig. 3 shows a 25 modified type of my device; Fig. 4 shows end view of Fig. 3; Fig. 5 shows another modification of my device; Fig. 6 shows end view of the device of Fig. 5.

The relation of the tie 42 to the rail and to 30 the anti-creeper are shown in Fig. 3. The arrow in Fig. 3 shows the direction of the creep of the rail.

The device of my invention consists of two parts, a yoke 2 and a combined wedge and 35 anchor 3. The yoke 2 I illustrate in the drawings in three types:-In Fig. 1, the yoke is made of a bar of metal with the ends 21 and 22 formed by bending the lesser thickness of the bar; in Fig. 3, the yoke is 40 made of a bar of metal with the ends formed by bending the greater thickness of the bar; in Fig. 5, the two forms of Figs. 1 and 3 are combined to attain the advantages of both, viz., the longer grip at the end 21' upon the 45 edge of the rail 1, and the greater strength at the end 22' by causing the stress of the wedge and anchor piece to act through the greater thickness of the bar, the result being attained by the twisting of the bar through a quarter | tightly to the rail.

member, 3, is grooved along one edge, 37, of [d] cribed, as I understand that deviations the wedge end to enable the part to take firm | from the types here shown and the methods seat upon the rail, and is provided with a here described may be made without de- 110 55 notch and a hole for spikes to anchor the part | parting from the spirit or scope of my invento the tie. The grooved edge is provided also I tion.

with a roughened surface and is shown in Fig. 1 at 38 as having transverse corrugations forming teeth for gripping securely the edge of the foot of the rail.

To prevent buckling downward, the device is given a buckle upward by bending the yoke 2 at the point 23 as shown most clearly in Fig. 2, the anchor wedge being preferably twisted through a corresponding angle at the 65 point 35 to enable the wedge end to lie snugly within the buckled end of the yoke and at the same time to enable the anchor end to lie flat upon the surface of the tie to which it must be spiked. The yoke is recessed at the angle 70 23 to make room for the lip of the wedge forming the lower portion of the grooved face 37 of the wedge. This lip is permitted to project below the edge of the rail to guard against the lifting of the wedge in a direction 75 toward the tread of the rail.

The device is assembled upon the railway rail by placing the yoke 2 around the foot of the rail as shown, and adjacent to a tie, driving the wedge of the anchor wedge through 80 the free end of the yoke 2 until the yoke is locked upon the rail; then spiking the anchor end of the wedge to the tie; in spiking to the tie, a spike 40 is driven first in the notch 33 whereby, by a movement of the anchor end 85 of the wedge swinging the part upon a point at or near the angle 36 as a fulcrum, a further tightening of the wedge in the yoke will be attained if such further tightening be at all possible, and then a spike 41 is driven through 9c the hole 34, locking the device finally in place.

The notch 33 provides a further locking detail in the inclination of its edge 33' to the line of the direction of travel of the rail. By 95 driving the first spike at that end of the notch 33 nearest the yoke of the device, any travel permitted by the looseness of the spike in the hole 34 or by the omission of that spike, will drag the anchor along the spike 100 in the 1 stell 33 and by the inclination of the bottom edge 33' of the notch will force the anchor end of the wedge element nearer to the rail and thus will lock the device more

50 turn at or near its middle portion. I do not wish to limit myself in all respects The combined locking wedge and anchor to the exact details herein illustrated and

Having thus described my invention, what I claim as new and desire to secure by United States Letters Patent is:

1. In a rail anti-creeper, a yoke, a wedge 5 for said yoke, and an extension arm on said wedge and forming an integral part therewith and having a hole therein to receive a spike driven into a tie for anchoring said wedge, substantially as described.

2. In a rail anti-creeper, a yoke, a wedge for said yoke, and an extension upon said wedge having a hole to receive a spike driven into a tie for anchoring said wedge, substan-

tially as described.

3. In a rail anti-creeper, a yoke adapted to embrace a rail and a wedge and having an angle at the line of junction of the rail and wedge, a wedge, and means for anchoring said wedge, substantially as described.

4. In a rail anti-creeper, a yoke embracing a rail and a wedge and having an angle at the line of junction of the rail and wedge, and a wedge having a twist whereby a projecting free end of the wedge may approach the 25 plane of the surface of the rail engaged by said yoke, substantially as described.

5. In a rail anti-creeper, a yoke embracing a rail and a wedge and having an angle at the line of junction of the rail and wedge, a wedge 30 having a twist whereby a projecting free end of the wedge may approach the plane of the surface of the rail engaged by said yoke, and means for anchoring the wedge, substan-

tially as described.

6. In a rail anti-creeper, a yoke embracing a rail and a wedge, a wedge having a groove on the surface of contact with the rail, and an extension arm on said wedge and forming an integral part therewith and having a hole to therein to receive a spike driven into a tie for anchoring the wedge, substantially as described.

7. In a rail anti-creeper, a yoke adapted to embrace a rail and a wedge and having an 45 angle at the line of junction of the rail and wedge, a wedge having a groove in the surface of contact with the rail, and means for anchoring said wedge, substantially as described.

8. In a rail anti-creeper, a yoke embracing a rail and a wedge, a wedge bent at an angle and extending beyond the angle in an extension for anchoring the wedge, and means for swinging the wedge upon a fulcrum at or 55 near the angle of the wedge to increase the engagement between the wedge the rail and the yoke, substantially as described.

9. In a rail anti-creeper, a yoke, a sliding wedge for said yoke, and an extension mem-60 ber for said wedge and adapted to pass over and in contact with the upper surface of a tie and having a hole for a spike whereby it may be anchored to a tie, substantially as described.

55 10. In a rail anti-creeper, a wedge ful-

crumed on the rail, a yoke embracing said wedge and the rail, and means for anchoring the wedge, substantially as described.

11. In a rail anti-creeper, an anchor part fulcrumed on the rail, a yoke embracing said 70 part and the rail, and an extension on said anchor part having a hole for a spike to anchor said part to a tie, substantially as described.

12. In a rail anti-creeper, a yoke embrac- 75 ing a rail and an anchor part, an anchor part bent at an angle and extending on one side of the angle to engage said yoke and on the other side of the angle to provide means for anchoring the part, and means for swinging 80 the anchor part upon a fulcrum at or near the angle to effect or increase the engagement of the anchor part the rail and the yoke, substantially as described.

13. In a rail anti-creeper, à yoke shaped at 85 one end to engage one side of the foot of a rail and to pass under the foot of the rail and having an angle at the alternative edge of the rail and projecting beyond the alternative edge of the rail and shaped at its free end to 90 engage an anchor part, an anchor part, said anchor part being fulcrumed upon the rail and extending upon one side of the fulcrum to engage said yoke and upon the other side of the fulcrum to engage a tie and means for 95 anchoring said part to the tie, substantially as described.

14. In a rail anti-creeper, a yoke shaped at one end to engage one side of the foot of a rail and to pass under the foot of the rail and 100 having an angle at the alternative edge of the foot of the rail and projecting beyond the alternative edge of the foot of the rail and shaped at its free end to engage an anchor part, an anchor part having a fulcrum upon 105 the edge of the rail and extending on one side of the fulcrum to engage the free end of the yoke and on the other side of the fulcrum as an operating and anchoring extension, and means for swinging said anchor part upon its 110 fulcrum, substantially as described.

15. In a rail anti-creeper, a yoke embracing a rail and a wedge, a wedge bent at an angle and extending beyond the angle in an extension for anchoring the wedge, and an in- 115 clined spike-engaging part of said extension whereby the travel of the wedge with the rail will swing the wedge upon its angle as a fulcrum to increase the engagement between the wedge and the yoke, substantially as de- 120 scribed.

16. In a rail anti-creeper, an anchor part fulcrumed on the rail, a yoke embracing said part and the rail, an edge on said anchor part Inclined to the edge of the rail and adapted to 125. engage a driven spike and whereby, by the movement of the anchor part jointly with the rail and sliding upon the spike, the anchor part will be swung upon its fulcrum, substantially as described.

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17. In a rail anti-creeper, a yoke embracing a rail and an anchor part; an anchor part bent at an angle, engaging the foot of the rail at the angle and extending on one side of the angle to engage said yoke and on the other side of the angle to provide means for anchoring the part, and a surface on said anchor part and inclined to the edge of the rail and adapted to engage a driven spike and whereby the joint movement of the wedge and rail past the driven spike will swing the anchor part upon its point of engagement with the rail, substantially as described.

18. In a rail anti-creeper, a wedge member adapted to be spiked to a tie, and having an edge adapted to lie in contact with the rail, a yoke bar adapted to include within two hook ends the rail and the wedge, and teeth on the face of said wedge adapted to lie in contact with the rail, substantially as described.

19. In a rail anti-creeper, a yoke embracing a rail and an anchor part, an anchor part adapted to lie within said yoke and having teeth to engage the rail, and an inclined edge on said anchor part inclined to the direction of creeping of the rail when the anchor part is in position and adapted to rest slidably against a driven spike whereby the movement of said anchor with the rail will increase the engagement of the anchor with the rail, substantially as described.

20. In a rail anti-creeper, an anchor part having a frictional contact surface for a rail-way rail, corrugations in said engaging surface to increase the frictional engagement between the anchor and the rail, a projecting part on said anchor and adapted to lie upon a tie, and means for anchoring said anchor part upon the tie, substantially as described.

21. In a rail anti-creeper, an anchor wedge, means for anchoring said part to a tie by spikes, a yoke for affixing said part frictionally to a rail, and a spike engaging surface on said part and inclined to the line of travel of said rail whereby by any movement of the anchor part with the rail the engagement of the anchor with the rail will be increased, substantially as described.

22. In a rail anti-creeper, an anchorwedge, means for anchoring said wedge to a tie by spikes, a yoke for affixing said part frictionally to the rail, corrugations on said part in its rail-engaging surface for increasing its grip upon the rail, and a spike-engaging surface on said part and inclined to the line of travel of the rail when said part is adjusted to the rail whereby by any movement of said anchor part with the rail the engagement of said part with the rail will be increased, sub-60 stantially as described.

23. In a rail anti-creeper, a yoke adapted to embrace a rail and an anchor and having an angle near the line of contact of the rail and the anchor, an anchor, and means for

spiking said anchor to a tie, substantially as 65 described.

24. In a rail anti-creeper, a yoke adapted to embrace a rail and an anchor and having an angle near the line of contact of the rail and the anchor, an anchor having a twist 70 whereby a projecting end of the anchor may approach the plane of the lower surface of the rail engaged by said yoke, and means for attaching said anchor to a tie, substantially as described.

25. In a rail anti-creeper, a yoke adapted to embrace a rail and an anchor and having an angle near the line of contact of the rail and the anchor, and an anchor having a twist whereby a projecting end of the anchor 80 may approach the plane of the lower surface of the rail engaged by said yoke, substantially as described.

26. In a rail anti-creeper, a yoke embracing a rail and an anchor and having an angle 85 near the line of junction of the rail and anchor, an anchor having a groove on the surface of contact with the rail, and means for spiking the anchor to a tie, substantially as described.

27. In a rail anti-creeper, a yoke embracing a rail and an anchor, an anchor having a groove on the surface of contact with the rail, and means for spiking the anchor to a tie, substantially as described.

28. In a rail anti-creeper, a yoke embracing a rail and an anchor part, an anchor part bent at an angle and extending beyond the angle in an extension adapted to lie upon the upper surface of a tie, and an inclined spike-engaging part of said extension whereby the travel of the anchor part with the rail will swing the anchor part upon its fulcrum to increase the engagement between the anchor part and the yoke, substantially as described. 105

29. In a rail anti-creeper, a yoke embracing a rail and an anchor part, an anchor part fulcrumed upon the rail, and an inclined spike-engaging edge on said anchor part whereby the travel of the anchor part with the rail will, through the engagement of the said edge with a driven spike, swing the anchor part upon its fulcrum to increase its engagement between the anchor part and the yoke, substantially as described.

30. In a rail anti-creeper, an anchor fulcrumed on the rail, a yoke embracing said anchor and the rail, and means for spiking the anchor to a tie, substantially as described.

Signed by me at Chicago, county of Cook and State of Illinois, in the presence of two witnesses.

NEIL E. SALSICH.

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Witnesses:

DAVID S. HULFISH, GEORGE P. BARTON