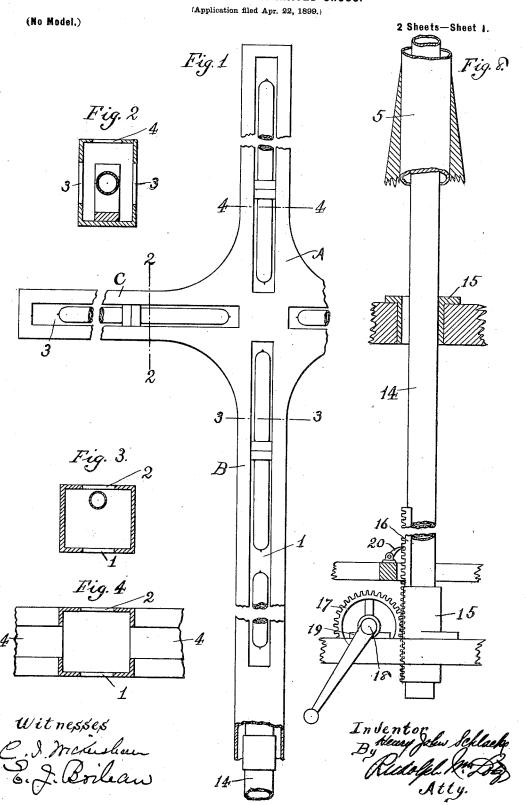
H. J. SCHLACKS.

## ELECTRICALLY ILLUMINATED CROSS.



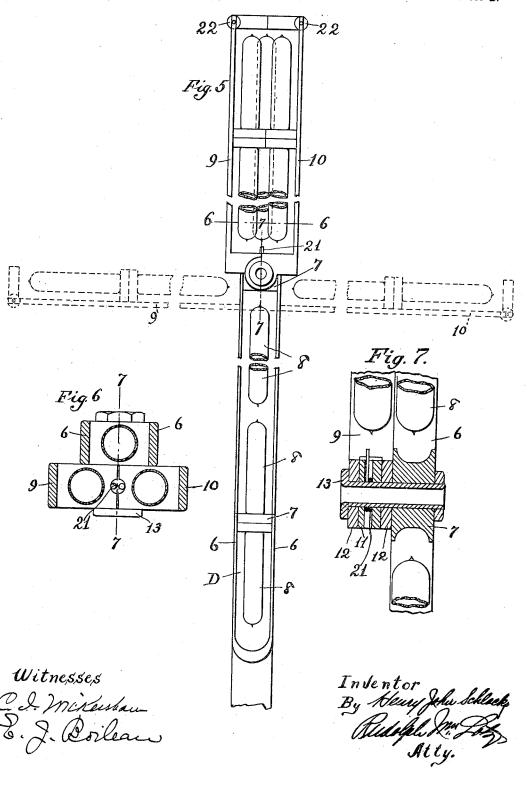
### H. J. SCHLACKS.

## ELECTRICALLY ILLUMINATED CROSS.

(Application filed Apr. 22, 1899.)

(No Model.)

2 Sheets-Sheet 2.



# UNITED STATES PATENT OFFICE.

HENRY J. SCHLACKS, OF CHICAGO, ILLINOIS.

#### ELECTRICALLY-ILLUMINATED CROSS.

SPECIFICATION forming part of Letters Patent No. 676,853, dated June 18, 1901.

Application filed April 22, 1899. Renewed May 15, 1901. Serial No. 60,366. (No model.)

To all whom it may concern:

Beit known that I, HENRY JOHN SCHLACKS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electrically-Illuminated Crosses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in an electrically-illuminated cross for church-steeples, the object being to provide 15 means for renewing the incandescent lamps without removing the cross or requiring ascension to the top of the steeple; and it consists in the features of construction and combinations of parts hereinafter fully described

20 and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a front elevation, partially broken away, of a cross constructed in accordance with my invention and show-25 ing the illuminating devices therein. Figs. 2, 3, and 4 are sections of the same taken on the lines 22, 33, and 44 of Fig. 1, respectively. Fig. 5 is a front elevation showing the removable illuminating devices in posi-30 tion to be inserted in the cross and showing the pivoted side arms in position for illuminating the arms of the cross in dotted lines. Fig. 6 is a sectional view on the line 6 6 of Fig. 5. Fig. 7 is a sectional view on the lines 35 7 7 of Figs. 5 and 6. Fig. 8 is a view, partly in section and partly in elevation, of the devices for supporting and raising and lowering the illuminating devices.

The object of my invention is to provide 40 simple and effective means for illuminating crosses on church-steeples, so that the lamps can be readily removed and replaced without removing or disturbing the cross and without requiring the ascension of a man on the out-45 side of the steeple to remove and replace the burned-out lamps. To this end I construct a hollow cross A, preferably of iron and having rounded corners at the point of connection of the upright B with the horizontal 50 arm C. Said cross is provided with slots 1 and 2 in the front and rear faces of the upright B and with slots 3 in the front and rear | the upper ends of said arms 9 and 10 I mount

faces of the arms C. Said arms C are also provided with slots 4 in their upper faces for purposes hereinafter specified. Said cross A 55 is connected at its lower end with a pipe 5, passing downwardly through the steeple, and through which the illuminating devices are adapted to pass into and out of said cross. Said illuminating devices consist of an up- 60 right D, consisting of two parallel plates 6, joined at their upper and lower ends and by intermediate cross-pieces 7, upon which the incandescent lamps 8 are mounted. Pivotally mounted on one of said cross-pieces 7 are 65 two arms 9 and 10, which are adapted to be swung together, as shown in full lines in Fig. 5, to enable them to pass through the pipe 5 and the upright B of the cross and to swing outwardly, as shown in dotted lines in Fig. 5, 70 and lie in the arms C of the cross when said devices are raised to a sufficient height. Said arms 9 and 10 are provided with lugs 11 and 12, respectively, the former of which fit between the latter, through which the hollow 75 bolt 13 passes, which likewise passes through one of the cross-pieces 7. Said upright member D is mounted upon the upper end of a pipe 14, mounted in bearings 15 in the crossbraces of the steeple, and carries a rack 16, 80 adapted to be engaged by a gear-pinion 17, mounted on a crank-shaft 18, running in bearings 19 on one of the cross-braces of the steeple. Said rack is also engaged by a pawl 20 to retain it in its raised position. When 85 it is desired to illuminate said cross, said illuminating devices are raised and the arms 9 and 10 thereof brought together and inserted into the lower end of said pipe 5, and by continuing to turn the pinion 17 the said 90 devices are brought into said cross A. Said arms 9 and 10 are forced apart by a spring 21, coiled around said bolt 13 and bearing at its ends against the adjacent portions of said arms, but until reaching the middle por- 95 tion of the cross A are prevented from spreading. As soon, however, as said middle portion is reached said arms 9 and 10 will begin to spread apart, and while so spreading and moving upward will project through said 100 slots 4 in the upper faces of said arms B of said cross A and gradually recede again until they lie horizontally in said arms. In

antifriction-rollers 22, which serve to decrease the friction when said illuminating devices pass through said pipe 5.

I have not shown the electrical connec-5 tions to avoid confusion, and, further, because I deemed it unnecessary, as every electrician could readily supply same.

I claim as my invention-

1. The combination with a hollow cross, 10 slotted on front face, of removable illuminating devices adapted to enter said cross and comprising a member adapted to fit within the upright member of the cross, and members carried by said first-named member adapted 15 to enter the arms of the cross.

2. The combination with a hollow cross adapted to be rigidly mounted on a steeple, of a removable cross carrying lamps adapted to fit within said rigid cross and provided 20 with arms adapted to fold together to permit the passage of said inner cross through the upright of said rigid cross.

3. The combination with a hollow cross adapted to be rigidly mounted on a steeple, 25 of a removable cross carrying lamps adapted to fit within said rigid cross and provided with arms adapted to fold together to permit the passage of said inner cross through the upright of said rigid cross, and devices with-30 in said steeple for inserting and removing said inner cross.

4. The combination with a hollow cross adapted to be rigidly mounted on a steeple, and a pipe extending downwardly from said 35 cross within said steeple, of a removable illuminating cross adapted to pass through said pipe into said hollow cross and having pivoted arms adapted to swing outwardly into the arms of said rigid cross, said removable 40 cross being mounted upon the upper end of a pipe telescopically movable in said firstnamed pipe and carrying devices adapted to be engaged by devices in said steeple for raising and lowering said inner cross.

5. The combination with a hollow cross 45 adapted to be rigidly mounted on a steeple, and a pipe extending downwardly from said cross within said steeple, of a removable illuminating cross adapted to pass through said pipe into said hollow cross and having piv- 50 oted arms adapted to swing outwardly into the arms of said rigid cross, said removable cross being mounted upon the upper end of a pipe telescopically movable in said firstnamed pipe and carrying a rack adapted to 55 be engaged by a gear-pinion mounted on a crank-shaft in said steeple for raising and lowering said removable cross.

6. The combination with a hollow cross adapted to be rigidly mounted on a steeple, 60 and a pipe extending downwardly from said cross within said steeple, of a removable illuminating cross adapted to pass through said pipe into said hollow cross and having pivoted arms adapted to swing outwardly into 65 the arms of said rigid cross, a spring interposed in said pivotal connection to force said arms apart, said removable cross being mounted upon the upper end of a pipe telescopically movable in said first-named pipe 70 and carrying a rack adapted to be engaged by a gear-pinion mounted on a crank-shaft in said steeple for raising and lowering said removable cross.

In testimony whereof I affix my signature 75 in presence of two witnesses.

HENRY J. SCHLACKS.

Witnesses:

RUDOLPH WM. LOTZ. C. I. WICKERSHAN.