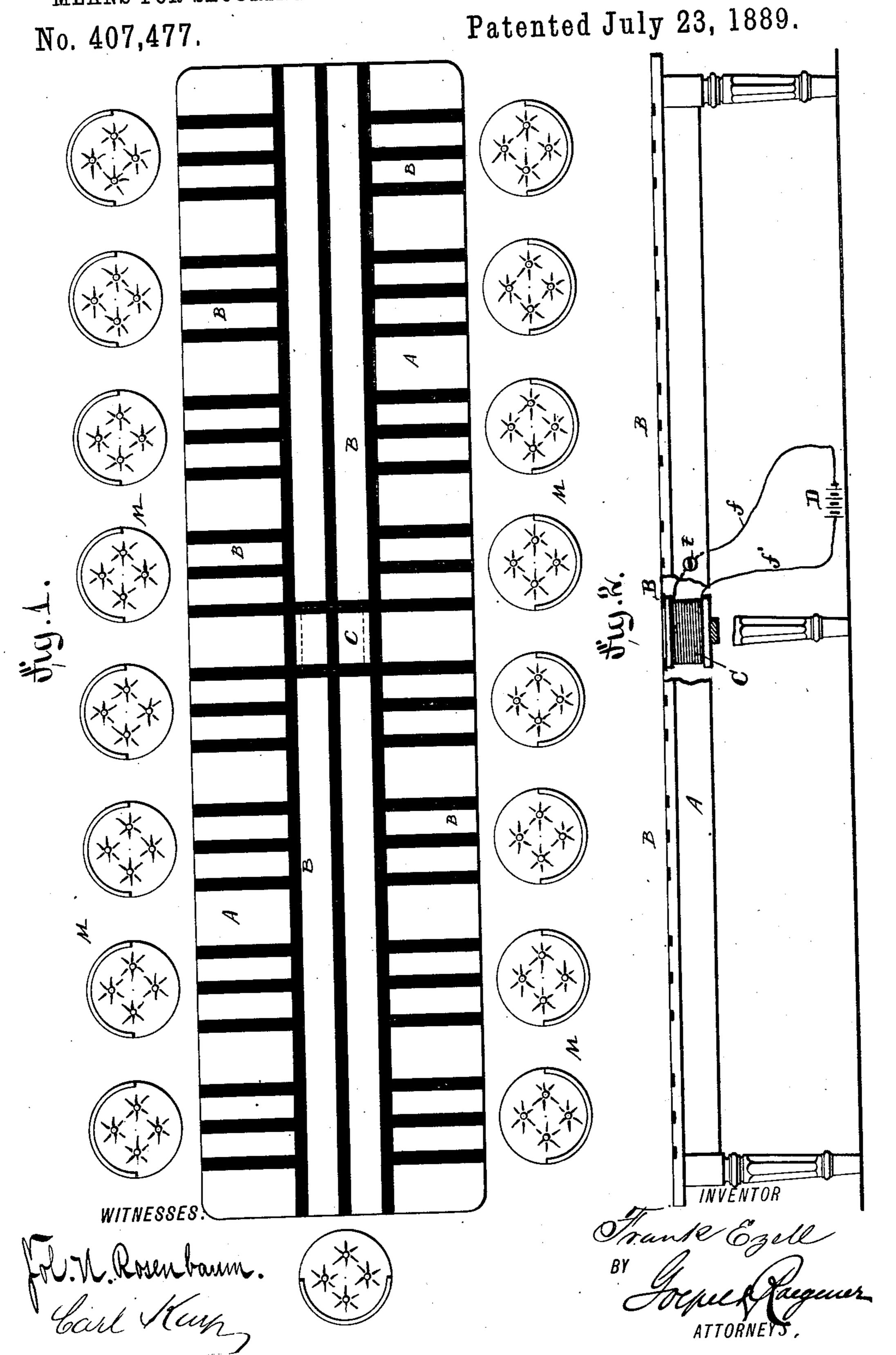
F. EZELL.

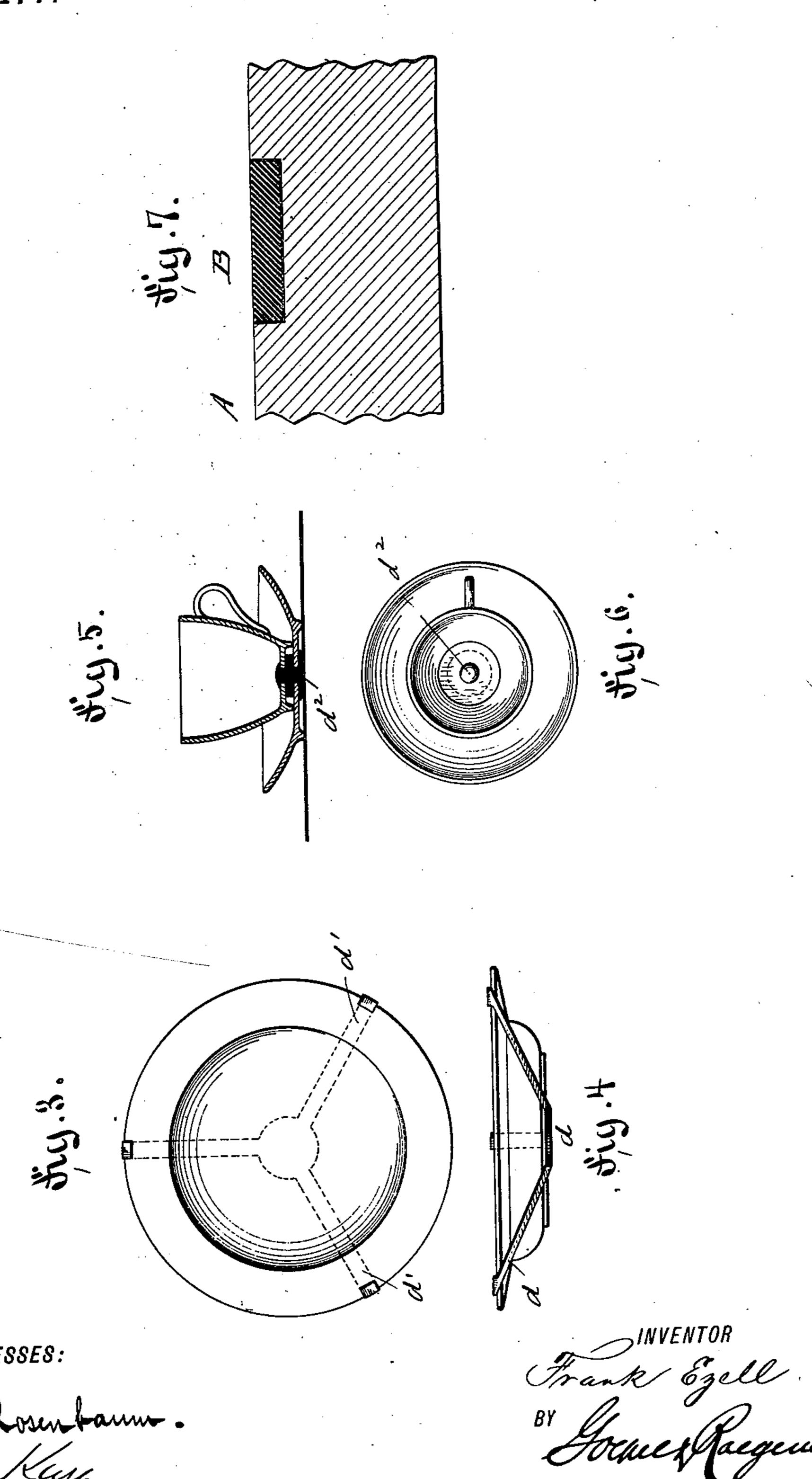
MEANS FOR SECURING DISHES TO THE TABLES OF STEAMSHIPS.



(No Model.)

F. EZELL.

MEANS FOR SECURING DISHES TO THE TABLES OF STEAMSHIPS. Patented July 23, 1889. No. 407,477.



WITNESSES:

## United States Patent Office.

FRANK EZELL, OF MARANIIAM, BRAZIL.

## MEANS FOR SECURING DISHES TO THE TABLES OF STEAMSHIPS.

SPECIFICATION forming part of Letters Patent No. 407,477, dated July 23, 1889.

Application filed April 13, 1889. Serial No. 307,129. (No model.)

To all whom it may concern:

Be it known that I, Frank Ezell, a resident of Maranham, in the Empire of Brazil, a citizen of the United States, have invented certainnewand useful Improvements in Means for Securing Dishes to the Tables of Steamships or other Vessels, of which the follow-

ing is a specification.

This invention relates to an improved means for securing plates and dishes to tables on steamships or other vessels, so as to prevent the slipping off of the same when the vessel rolls or pitches in stormy weather; and the invention consists in providing the tables on board ship with magnetized iron or steel strips, which are laid in flush with the top surface of the table, while the plates and dishes and other crockery are provided with suitable disks or strips of soft iron or steel, so as to be firmly held in position when placed in contact with the magnetized strips on the table.

In the accompanying drawings, Figure 1 represents a plan of a dining-table for a ship provided with magnetized strips according to 25 my invention. Fig. 2 is a side elevation of the same, a portion of the center being broken out to show the electro-magnet for magnetizing the metallic strips. Figs. 3 and 4 are respectively a top view and side view of a 30 plate provided with soft-iron disk at the bottom. Figs. 5 and 6 are respectively a vertical central section and a top view of a cup and saucer provided with soft-iron disks for adhesion to each other and to the magnetized 35 strips of the table, and Fig. 7 is a detail vertical transverse section of one of the magnetized strips set into the table.

Similar letters of reference indicate corre-

sponding parts.

Referring to the drawings, A represents a table, and BB a number of metal strips which are laid in recesses in the top of the table, so as to be flush with the upper surface of the same. The strips are arranged in such a manner that three longitudinal strips extend throughout the full length of the table, while cross-strips extend from the longitudinal strips toward the sides of the same. The strips are made of soft iron or steel and applied either permanently or temporarily to the table, as desired. They are magnetized by an electro-magnet C, which is arranged at the

center of the table and connected by wires f f' with a source of electricity, such as a battery or a dynamo, in case the vessel is lighted 55 by electricity. A suitable switch t is provided, by which the current from the generator may be controlled at will by the steward or other party presiding at the table. The connection with the battery or dynamo is interrupted 60 when the meals are over and the magnetizing of the strips is no longer necessary.

M M are the chairs.

The plates and dishes used in connection with the tables are provided with soft-iron 65 disks d, which are attached in any suitable manner to said plates or dishes. In Figs. 3 and 4 a plate is shown, to which the soft-metal disk is applied by arms d', having hookshaped ends. All the flanged dishes—such as 70 tumblers, wine-glasses, &c.—may be provided with disks in the same manner. For cups and saucers, dishes, bowls, and vessels of a similar nature, the soft-metal disk  $d^2$  may be applied permanently to the bottom of the 75 same, as shown in Figs. 5 and 6.

The table-cloth is spread on the table and retained thereon by suitable buttons or otherwise, the attractive force of the magnetized strips being strong enough to retain the plates 80 and dishes wherever they are placed on the table, so as to prevent their sliding away and

breaking.

By my improved arrangement of magnetized strips the plate and disk holding rings or racks 85 which are used on the dining-tables of vessels may be dispensed with and a more effective and satisfactory arrangement for this purpose used in place thereof. It can be applied to the tables and crockery at present in use with lit-90 tle change in the construction of the same.

I do not herein claim the articles of tableware provided with magnetizable metallic pieces, as they constitute the subject-matter of an application filed by me July 10, 1889, 95

Serial No. 317,044.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A dining-table provided with longitudinal magnetizable metallic strips and with laterally-projecting magnetizable metallic strips in connection with said longitudinal strips.

2. A dining-table provided with longitudinal magnetizable metallic strips extending

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through the center thereof and with laterallyprojecting magnetizable metallic strips in connection with the longitudinal strips and disposed at intervals along the table.

3. A dining-table provided with longitudinal magnetizable metallic strips and with laterally-projecting magnetizable metallic strips in connection with said longitudinal strips, in combination with an electro-magnet in connection with the system of strips.

4. A dining-table provided with longitudinal magnetizable metallic strips extending through the center thereof and with laterally-projecting magnetizable metallic strips in con-

nection with the longitudinal strips and disposed at intervals along the table, in combination with an electro-magnet in connection with the system of strips.

In testimony that I claim the foregoing as my invention I have signed my name in pres- 2c

ence of two subscribing witnesses.

FRANK EZELL.

Witnesses:
PAUL GOEPEL,
CARL KARP.