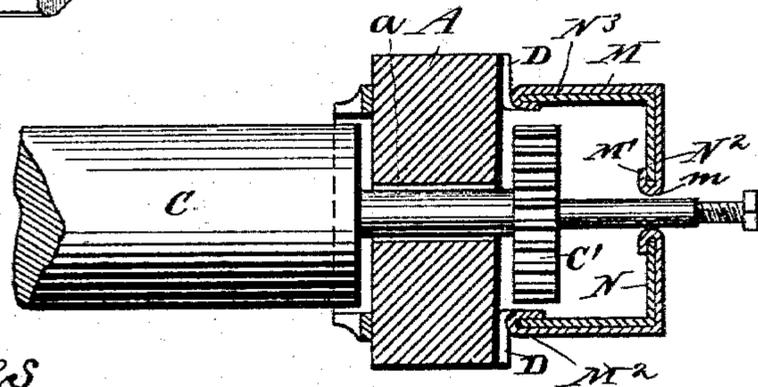
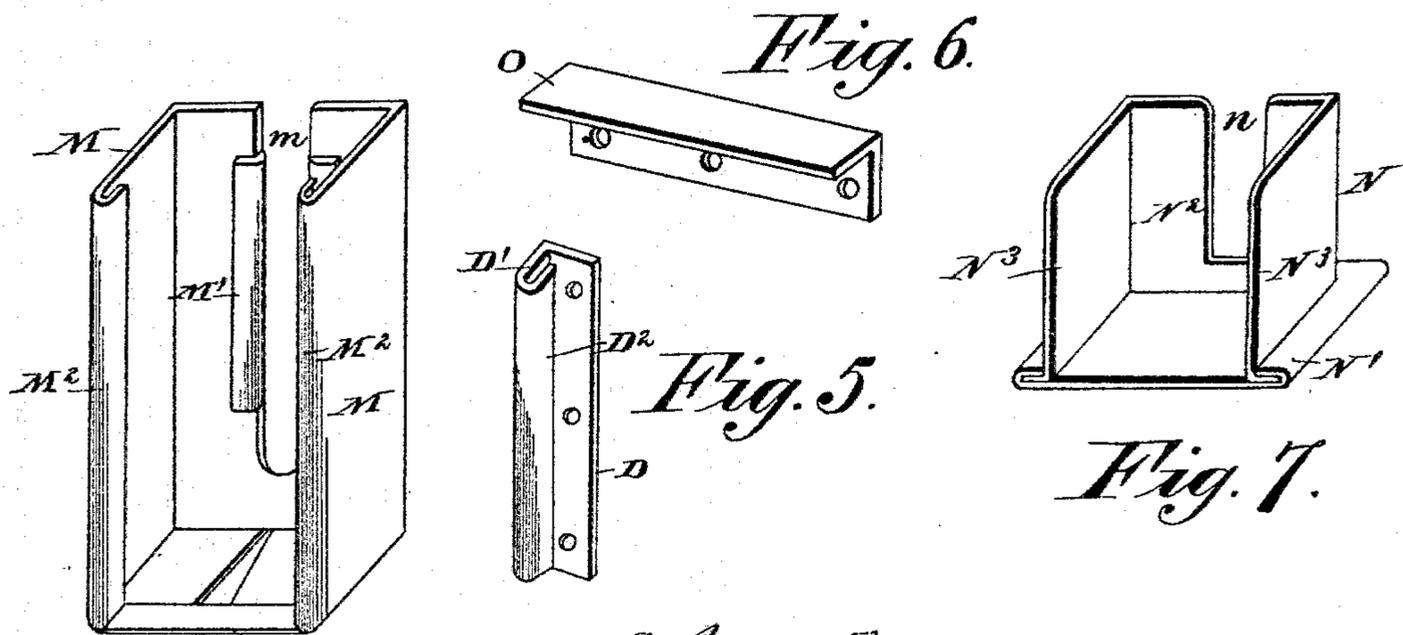
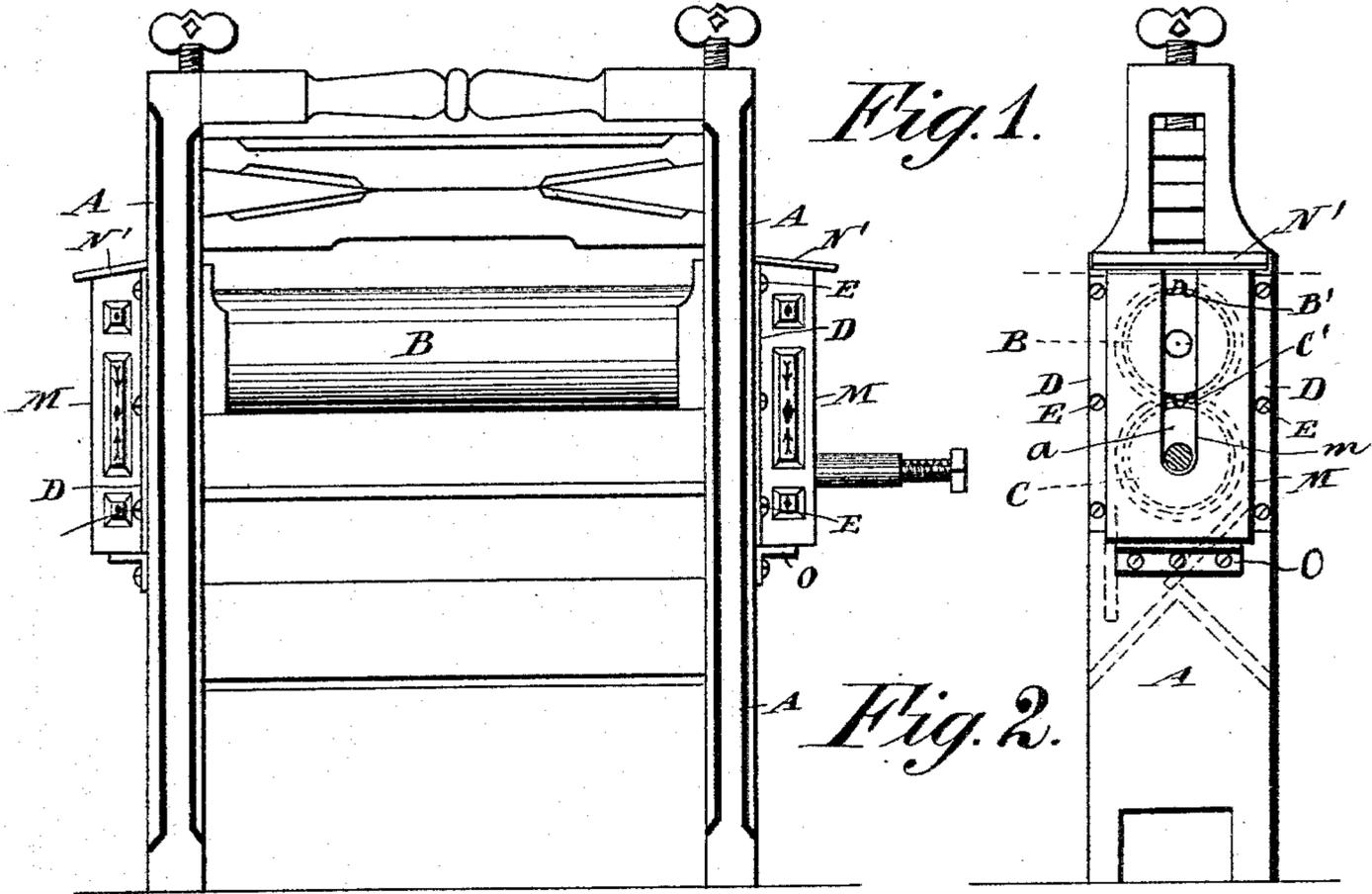


(No Model.)

W. I. GONG.
GEAR CASING FOR CLOTHES WRINGERS.

No. 515,910.

Patented Mar. 6, 1894.



Witnesses

W. F. Boyle

Charles R. Searle.

Inventor

W. I. Gong
By Thomas Drew Stearns

Attorney

UNITED STATES PATENT OFFICE,

WONG I. GONG, OF NEW YORK, N. Y.

GEAR-CASING FOR CLOTHES-WRINGERS.

SPECIFICATION forming part of Letters Patent No. 515,910, dated March 6, 1894.

Application filed April 14, 1893. Serial No. 470,311. (No model.)

To all whom it may concern:

Be it known that I, WONG I. GONG, a subject of the Emperor of China, residing in the city and county of New York and State of New York, have invented a certain new and useful Improvement in Gear-Casings for Clothes-Wringers, of which the following is a specification.

The invention applies to all grades of roller wringers which are furnished with the usual gearing on the shafts exterior to the frames. I have devised a protecting case for the gearing, with peculiar provisions for connecting the parts of the same to each other and to the wringer frame. My protecting case preserves the gearing from injury, and prevents the clothes from being injured by the gears. It is especially important in preventing oily or iron-rusted water from dripping or being thrown off from the gear teeth and getting upon the clothes. In case the teeth are allowed to run dry and to cut, the fine particles of iron thrown off are arrested by this casing.

The accompanying drawings form a part of this specification and represent what I consider the best means of carrying out the invention.

Figure 1 is a front elevation of a wringer with my invention applied. Fig. 2 is a side view of the same. The remaining figures are on a larger scale. Fig. 3 is a horizontal section of a portion. Fig. 4 is a perspective view of the casing detached. Fig. 5 is a perspective view of one of the holding strips detached. Fig. 6 is a similar view of one of the stops. Fig. 7 is a perspective view of the top detached and inverted.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the wood framing of an ordinary wringer, and *a* the open slot in which the shafts of the rollers are received.

B is the upper roll and C the lower roll.

B' C' are the gear wheels fixed on the upper and lower shafts respectively, and performing their usual functions.

On each side of the slot *a* I fix strips D of sheet metal, which may be galvanized sheet iron, folded or bent so as to extend outward and again partially back toward the wringer frame, as indicated by D' D². These strips

form supports or guides for my removable frame, and are fastened by screws E, and thereby permanently fixed on the wringer frame. 55

M is the open-topped main body of my casing. It is of rectangular cross section, with an open slot *m* in its front face arranged to coincide with the slot *a* in the wringer frame. In forming the slot *m* the metal at the extreme bottom is cut out and removed, but above this the metal is folded along each edge as indicated by M'. This slot *m* receives the extended shaft of the lower roller, when my casing or shield is in position for use. The edges M² which apply against the wringer frame, are folded inward. The casing is held to the wringer frame by the engagement of these folded edges M² with the folded portion D', D² of the guides. The union is effected by thrusting the casing M upward from below in the required position. It is held up by friction and also by a removable piece O temporarily nailed or screwed across the bottom. 60 65 70

N is the upper portion of my casing. This is more easily removed than the part M. It is of rectangular cross section, with a plain edged slot *n* in its front, opening downward, and an overhanging top N'. The edges N² adjacent to the slot *n*, are adapted to engage within the folds M'. The extreme rear edges or back edges N³ are received in the folds, M². This cap N is kept in place by friction and also by gravity. It can be partially or entirely removed by simply drawing it upward, and is easily restored again to position for use. It allows the gearing to be examined and oiled, or removed and replaced, with little trouble. When, as usual, there are gear wheels on each end of each roller, there should be a similar casing to protect the gears on the opposite ends, but such casing need not have the slots *m* and *n*, because the shafts of the wringer do not extend beyond such casing. 75 80 85 90

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. I can make the parts of other materials than galvanized sheet iron. Sheet brass or cast metal of various kinds may be used. The casing may be paneled or otherwise made ornamental, if desired. 95 100

I claim as my invention—

1. In a wringer, the guides D fixed permanently on the framing A, and having folds

D', D², extending up and down, and open below, in combination with the main part M of the shield equipped with re-entering flanges M², arranged to engage with such guides, as
5 herein specified.

2. A gear casing comprising the guide-plates D, the shield M having the slot *m* and the re-entering flanges M² adapted to engage with the guide-plates D and the top N having the

slot *n*, said plate adapted to be applied and removed as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

WONG I. GONG.

Witnesses:

CHARLES R. SEARLE,

M. F. BOYLE.