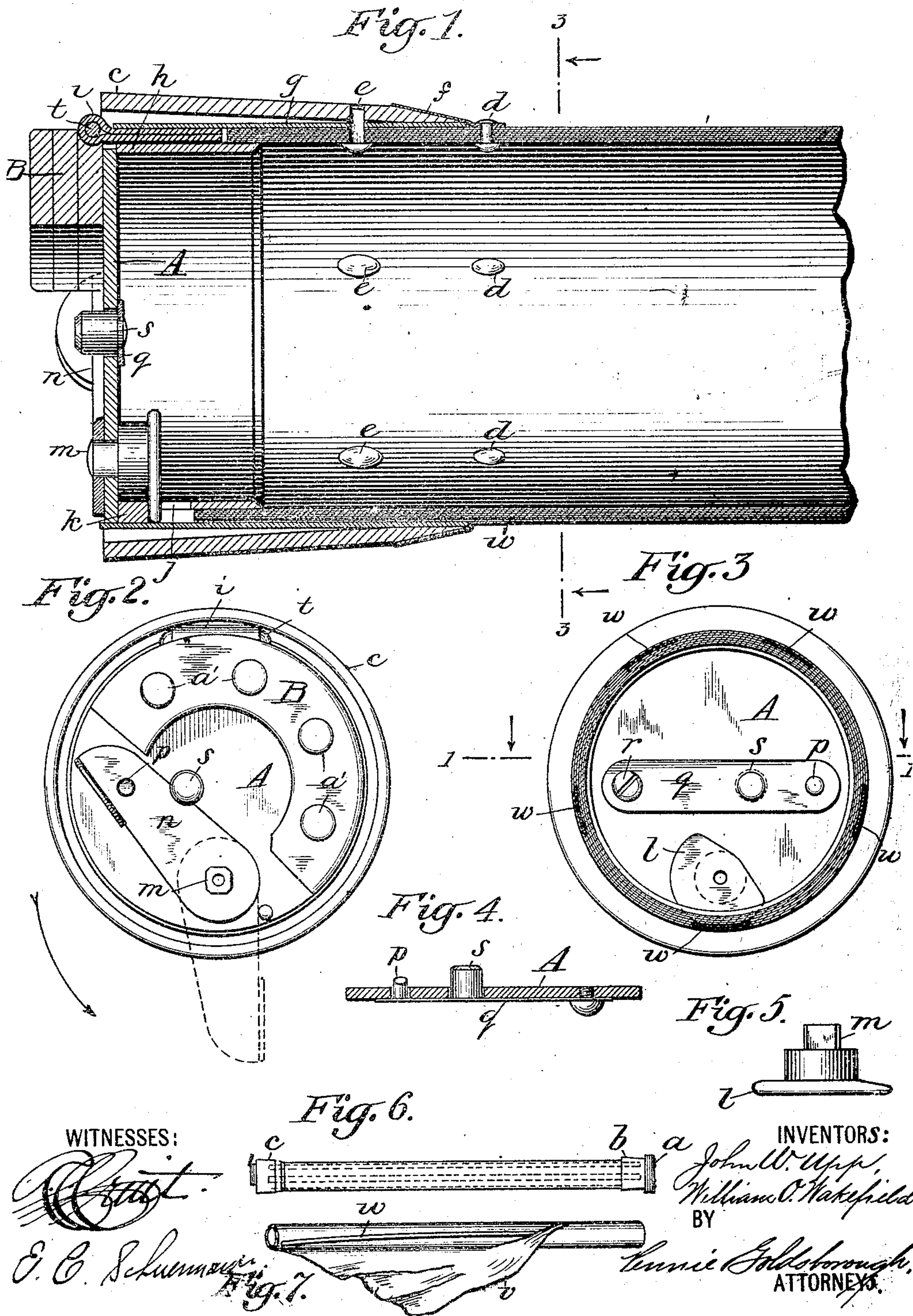


No. 860,947.

PATENTED JULY 23, 1907.

J. W. UPP & W. O. WAKEFIELD.
PNEUMATIC DESPATCH CARRIER.

APPLICATION FILED APR. 5, 1907.



UNITED STATES PATENT OFFICE.

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WAKEFIELD ASSIGNOR TO SAID UPP.

PNEUMATIC-DESPATCH CARRIER.

No. 860,947.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed April 5, 1907. Serial No. 386,467.

To all whom it may concern:

Be it known that we, JOHN W. UPP and WILLIAM O. WAKEFIELD, citizens of the United States, residing at and whose post-office address is Schenectady, county
5 of Schenectady, State of New York, have invented certain new and useful Improvements in Pneumatic-Despatch Carriers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it
10 appertains to make and use the same.

Our invention relates to certain new and useful improvements in pneumatic despatch carriers, and is designed to provide a structure combining strength, lightness, and flexibility, with economy of manufacture
15 and durability during long continued use.

In the accompanying drawing, Figure 1 represents a longitudinal central section taken on a plane indicated by the line 1—1 of Fig. 3, of one end of a pneumatic despatch carrier embodying our invention; Fig. 2 represents an end elevation thereof, on a smaller scale; Fig. 3 represents a cross-section, also on a smaller scale, taken on a plane indicated by the line 3—3 of Fig. 1; Fig. 4 represents a sectional elevation of the means for locking and releasing the securing catch for the hinged
20 end cover of the carrier; Fig. 5 represents, in elevation, the cam element of the securing catch; Fig. 6 represents, on a still smaller scale, an exterior view of the complete carrier, the location of the flexible stiffeners for the main body portion being indicated by dotted
25 lines; and Fig. 7 represents a view of the main body portion with a portion of its fabric constituent partially unrolled, to disclose one of the flexible stiffeners.

Similar letters of reference indicate similar parts throughout the several views.

35 Referring to the drawing, it will be noted that the main body portion of the carrier has attached to it at its forward end the customary piston head of the usual leather disks *a* and leather sleeve *b* (see Fig. 6). At its rear end it is provided with a leather sleeve *c* cemented to a strip of fabric *f* which is riveted at *d*, and a second set of single-headed rivets *e* engaging corresponding apertures in the sleeve reinforces the anchoring rivets *d*, while permitting a certain degree of freedom of adjustment of the sleeve in its passage through
40 the pneumatic main.

The sleeve has a rearward flare as shown, and between it and the main body portion of the carrier extends the sheath *g* of metal. An inner short cylinder *h*, of metal, fits within the main body portion and is
50 cemented or otherwise attached thereto, and the strap

hinge *i* of the end cover is riveted in place between the two metal surfaces. The cylinder *h* is provided, furthermore, with a recess *j* and shoulder *k* for engagement with cam *l* of the securing catch.

The securing catch is provided with a squared end *m* 55 whereby it is fixed to the operating handle *n*, and the said handle is normally locked in position by means of a locking button *p*, passing through an opening in the hinged cover A. The locking button is mounted upon the free end of a flat spring *q*, fulcrumed at *r* and having
60 a push-pin *s*, which also extends freely through an opening in the hinged cover, so that, on pushing the pin *s* inwardly, the button *p* will be withdrawn from the operating handle *n*, thereby releasing said handle and permitting it to be turned to release the securing catch 65 of the hinged cover, when it is desired to open the carrier in order to load it or to remove its contents.

In order to protect, and afford a secure anchorage for the hinge-pin *t* of the cover, and to stiffen and strengthen the cover and prevent it from rocking back too far on its
70 hinge when opened, there are provided the stout leather segments B, secured in place by the rivets *a'*. These leather segments B also serve as buffers to take up shock if carrier becomes lodged in line or is overtaken by a carrier, which may immediately follow it. It should
75 be noted that these leather buffers extend practically to the edge of the cover, so that shock is transmitted through whole length of carrier which has been reinforced by stiffening strips and cylinder *h* which rests
80 upon them.

The main body portion of the carrier constitutes the principal feature of novelty and advantage in the new construction. It is made up of duck or like fabric *v* (see Fig. 7) saturated more or less with an adhesive cement (preferably waterproof) and wrapped about 85 a forming mandrel to the desired thickness. During the formation of the said main body portion, we insert, preferably at equally-spaced intervals, a series of flexible flat steel springs *w*, or their equivalents. The main function of these springs is to impart strength to 90 the structure, especially against the buckling or upsetting strains to which the carrier is subjected when it emerges from the pneumatic main at the delivery station or is struck from behind. They also permit the carrier to be made lighter for the same carrying capacity, 95 and to maintain normally its cylindrical shape, while at the same time giving it a limited resilient flexibility thereby permitting it to conform itself during transit to any slight irregularities or bends in the pneumatic main. After the main body portion has been formed 100

upon the mandrel, as described, it is desirable to give it a final thin coating of a quickly-setting waterproof varnish or cement.

Having thus described our invention, what we claim is:

1. A pneumatic despatch carrier, whose main body portion is made up of layers of fabric united to form a tube and having a resilient flexible reinforcement, substantially as described.
- 10 2. A pneumatic despatch carrier, whose main body portion is made up of layers of fabric united to form a tube and having resilient flexible reinforcement consisting of a series of flat spring strips, substantially as described.
- 15 3. A pneumatic despatch carrier, whose main body portion is made up of layers of fabric united to form a tube and having a resilient flexible reinforcement consisting of a series of flat spring strips, said strips being arranged longitudinally and spaced apart, substantially as described.
- 20 4. A pneumatic despatch carrier, whose main body portion is made up of layers of fabric cemented together to form a tube and having interposed between adjacent lay-

ers and enwrapped therein a series of longitudinal flat steel springs, substantially as described.

5. A pneumatic despatch carrier, having a hinged end cover, a securing catch therefor consisting of a cam provided with an operating handle, and a locking and releasing button engaging the operating handle, substantially as described. 25

6. A pneumatic despatch carrier, having a hinged end cover, a securing catch therefor consisting of a cam provided with an operating handle, and a locking and releasing button engaging the operating handle, said button being mounted upon a flat spring provided with a push-pin, substantially as described. 30

7. A pneumatic despatch carrier, having a hinged end cover, strengthened and stiffened by a number of leather segments riveted thereto, substantially as described. 35

In witness whereof, we have hereunto set our hands this 21st day of March, 1907.

JOHN W. UPP.

WILLIAM O. WAKEFIELD.

Witnesses:

BENJAMIN B. HULL,

MARGARET E. WOOLLEY.