P. D. PARSONS.

SUSPENSION DEVICE FOR PAPER PACKAGES AND THE LIKE.

APPLICATION FILED MAR. 6, 1920.

1,379,719. Patented May 31, 1921.

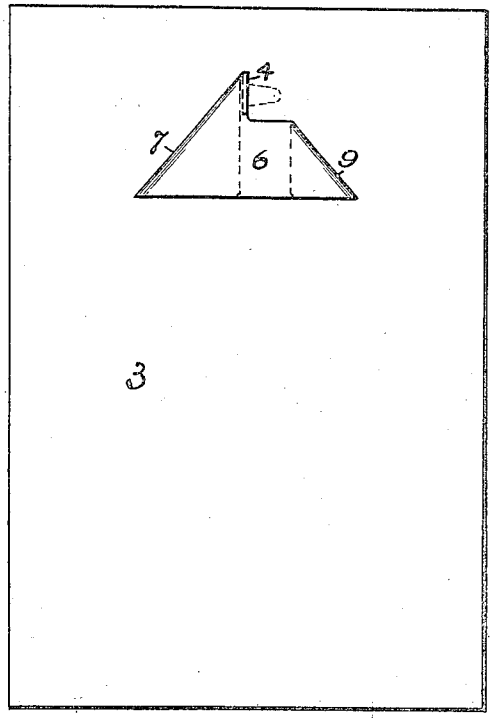


FIG. 1

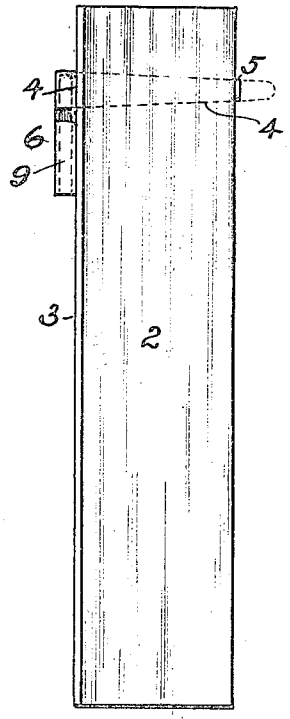


FIG. 2

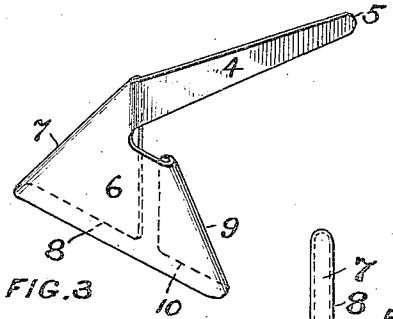


FIG. 3

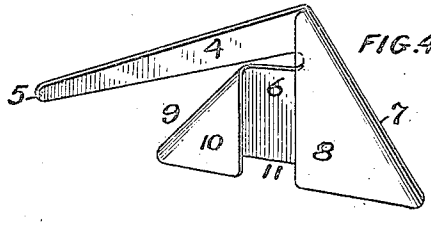


FIG. 4

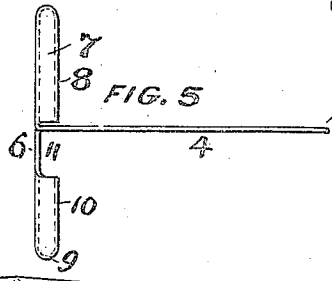


FIG. 5

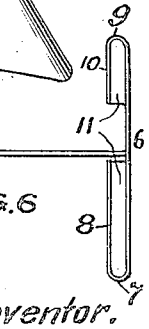


FIG. 6

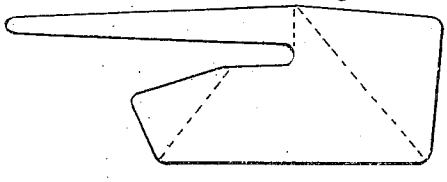


FIG. 7

Inventor.

Philip D. Parsons

By [signature]

Attorney.

UNITED STATES PATENT OFFICE.

PHILIP D. PARSONS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SCOTT PAPER COMPANY, A CORPORATION OF PENNSYLVANIA.

SUSPENSION DEVICE FOR PAPER PACKAGES AND THE LIKE.

1,379,719. Specification of Letters Patent. Patented May 31, 1921.

Application filed March 6, 1920. Serial No. 363,703.

To all whom it may concern:

Be it known that I, PHILIP D. PARSONS, a citizen of the United States, and resident of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Suspension Devices for Paper Packages and the like, of which the following is a specification.

The invention has for its object the construction of a toilet paper package suitable for use in connection with certain types of dispensing cabinets and is an improvement upon the type of toilet paper package and suspension device set out in Letters Patent Number 843,771, dated February 12, 1907; and more particularly the improvement has reference to the special means for holding the paper package in firm condition to a suitable stiff paper or cardboard backing and providing thereat a metallic socket adapted for supporting the paper package upon a projecting portion of a feeding device in the cabinet, in which the paper is placed and from which it is dispensed, one sheet at a time.

My object is further to provide an integral socket and prong of sheet material, preferably of metal, which retains its shape when bent, and adapted to hold the sheets of tissue paper in superposed relation and upon a backing sheet of stiffer paper or cardboard, the socket portion being sustained adjacent the outer surface of the backing sheet and clamping it to the assembled tissue paper sheets, so that it may completely protect the said tissue paper sheets from injury. By making the socket of metal integral with the prong, the latter retains the socket in proper position, with its open end downward; and the socket, being of metal, retains its open shape and is easily positioned upon the support, which sustains the paper package within the dispensing cabinet.

By making the socket of metal or material stamped, bent or folded and set in fixed shape, and distinct from the paper or cardboard backing of the package, the latter may be of full area of the tissue paper sheets and the upper corners of the backing are allowed to remain flat and shield said tissue paper sheets, so that they are not permitted to curl or fold backward, a condition which has heretofore caused much loss and interference with proper use in the dispensing cabinets.

My invention also consists of improvements hereinafter described whereby the above objects and results are attained, said improvements comprising certain organization and combination of parts which are fully described hereinafter and more particularly defined in the claims.

Referring to the drawings: Figure 1 is a rear view of the paper package; Fig. 2 is a side elevation of the same; Fig. 3 is a perspective view of the metal fastening for the paper constituting the package before the same has been applied thereto; Fig. 4 is a perspective view of the same, when looking from another point of view; Fig. 5 is a plan view of the same looking down upon the device; Fig. 6 is an inverted view of the same; and Fig. 7 is a plan view of the metal stamping before it is bent into the shape shown in Figs. 3 and 4.

2 is the package proper and is formed of a large number of sheets superposed upon each other and provided with a backing 3 of heavy paper or cardboard. These sheets of paper and backing are held tightly together by the metallic fastening device illustrated in Fig. 3, the prong 4 of which being forced through the paper and backing, as indicated, and the end 5 thereof bent over at right angles to clench upon the outer face of the paper package. The metal at the rear end of the prong 4 is bent into a socket 6. This socket comprises the rear triangular shaped body bent obliquely at its opposite edges, as indicated at 7 and 9, and the said bent portions providing the inner sides 8 and 10, respectively, to the socket. When these inner sides are bent toward each other, as indicated in the several views, a socket 11 is formed between the said part and the body part 6 at the rear. This socket is inverted V-shape so that it may center itself upon an upwardly extending prong formed on a plate and upon which the package is hung when placed in the cabinet and by which plate it may be spring-pressed forward against the distributing roller. The cabinet is not involved in the present invention, but the package is to be adapted for that type of a cabinet by which the

sheets may be dispensed, one at a time, by the action of a friction feed roller which may be rotated by hand and arranged for action upon the exposed front sheets of the package successively.

By reference to Fig. 7, it will be seen that the sheet metal blank from which the socket device is formed is exceedingly simple in shape and requires very little sheet metal. The socket of this device is provided with oppositely inclined end walls, by means of which the proper positioning of the socket upon the supporting plate in the cabinet is assured, when the package is placed in position for dispensing of the paper. In this manner, the paper package is enabled to not only hang positively in a vertical position, but is also held against lateral displacement, and is, furthermore, positively centered in position within the cabinet so that it is properly presented to the roller and the aperture in the bottom of the cabinet through which the paper is forced by the roller in the act of being dispensed. A better understanding of the relation of the paper package within the cabinet will be had by reference to Letters Patent No. 1,106,559, dated August 11th, 1914, which shows the general arrangement of the cabinet and the paper therein, though the socket for supporting the paper in the present instance is different from the manner of holding the paper to the special plate in the cabinet of the patent just referred to.

The general construction of a paper package (now in general use in connection with a dispensing cabinet) is one in which a socket is provided at the rear of the package, as shown in Letters Patent No. 765,599, dated July 19th, 1904, in which the backing paper is folded obliquely at its upper corners to provide a V-shaped socket and which folds are held in position by means of a metallic prong which extends through the paper package and is doubled over at each end thereof, and in that manner holds the sheets together and at the same time holds the folds of the paper backing, so that the socket is more or less firm in its shape and structural arrangement. Said construction, however, permits the corners of the tissue paper of the package at the upper part to be exposed and, therefore, the paper has a tendency to become deranged and is often creased backward and otherwise injured, so that when placed in the cabinet it is not in a satisfactory condition; and if the paper is thus injured in packing or transportation, it is objectionable to the consumer or distributer and, because of that, it would be returned at considerable loss to the manufacturer. In the present invention, the cardboard or stiff paper backing is of the exact area of the tissue paper and consequently forms a solid firm backing for the paper package and is in no way bent or folded or in any other way shaped as to allow the paper sheets themselves to become exposed or in position at the back so as to be injured. It will, therefore, be seen that a socket which is formed of the metal, integral with the prong which holds the paper sheets together, is a desirable construction, first, because it does not in any manner depend upon the frailty of the paper for the socket, and secondly, because the metallic socket is integral with the prong which holds the paper and therefore, provides a stronger supporting construction than could be formed from the paper backing itself.

By referring to Fig. 7, it will be seen that the prong part is directly integral with the body and may be bent at right angles thereto, as in Fig. 5, and that in doing so, the flange portions 8 and 10 are in no way disturbed. On the contrary, when the triangular portions 8 and 10 are bent parallel to the body 6 to provide the oppositely inclined diagonal grooved portions of the socket 11, the prong 4 may then be bent at right angles to the body 6 and practically against the vertical edge of part 8 (Figs. 5 and 6) and thereby provide a strong construction. This enables quick positioning of the prong at right angles to the plane of the socket and adapting it to be mechanically handled in a machine for introducing it through the paper. In this connection, because of the fact that the prong 4 is integral with the back 6 and not directly with one of the flange portions 8 and 10, the driving action of the machine for applying the socket and prong to the package enables the power to be applied to the socket back 6 and prong 4 directly in forcibly inserting the prong through the paper package.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable, and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that I do not restrict myself to the details, as the same are susceptible of modification in various particulars without departing from the spirit or scope of the invention.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A suspension device for paper packages and the like, consisting of an integral sheet material having a body part in which the opposite corners are separately bent over in opposite directions to provide rigid grooved portions converging to form a socket and also having an extended prong part integral with the body intermediate of the grooved portions and bent at right

angles to the body part and plane of the socket thereof and extending transversely across said socket.

2. The invention according to claim 1, further characterized by having the finished body formed of general triangular shape notched at one side near the apex.

3. The invention according to claim 1 further characterized by having the oppositely bent over corners of the body of substantially triangular shape to form alined side walls of relatively great horizontal length to the bottom of the socket to approximate in aggregate length the continuous side wall of the bottom of said socket.

4. The invention according to claim 3, further characterized by having the bent over triangular corners of different sizes and the larger thereof extended up to the apex of the body to provide an abutment edge to limit the bending of the prong.

5. A suspension device for paper packages and the like, formed of sheet metal and having a general triangular shaped body part provided with bent triangular parts providing opposed diagonally arranged grooved portions and a substantially triangular shaped socket between them and said body part further having a prong bent at right angles thereto for supporting the paper or other article to be suspended.

6. The invention according to claim 1, combined with a rectangular backing of stiff sheet adapted to come between the tissue paper sheets of the package and socket portion of the suspension device and the prong of the suspension device extending through the backing sheet and adapted for also extending through the tissue paper sheets near the upper and middle portions thereof for holding them to the backing sheet and socket.

In testimony of which invention, I hereunto set my hand.

PHILIP D. PARSONS.