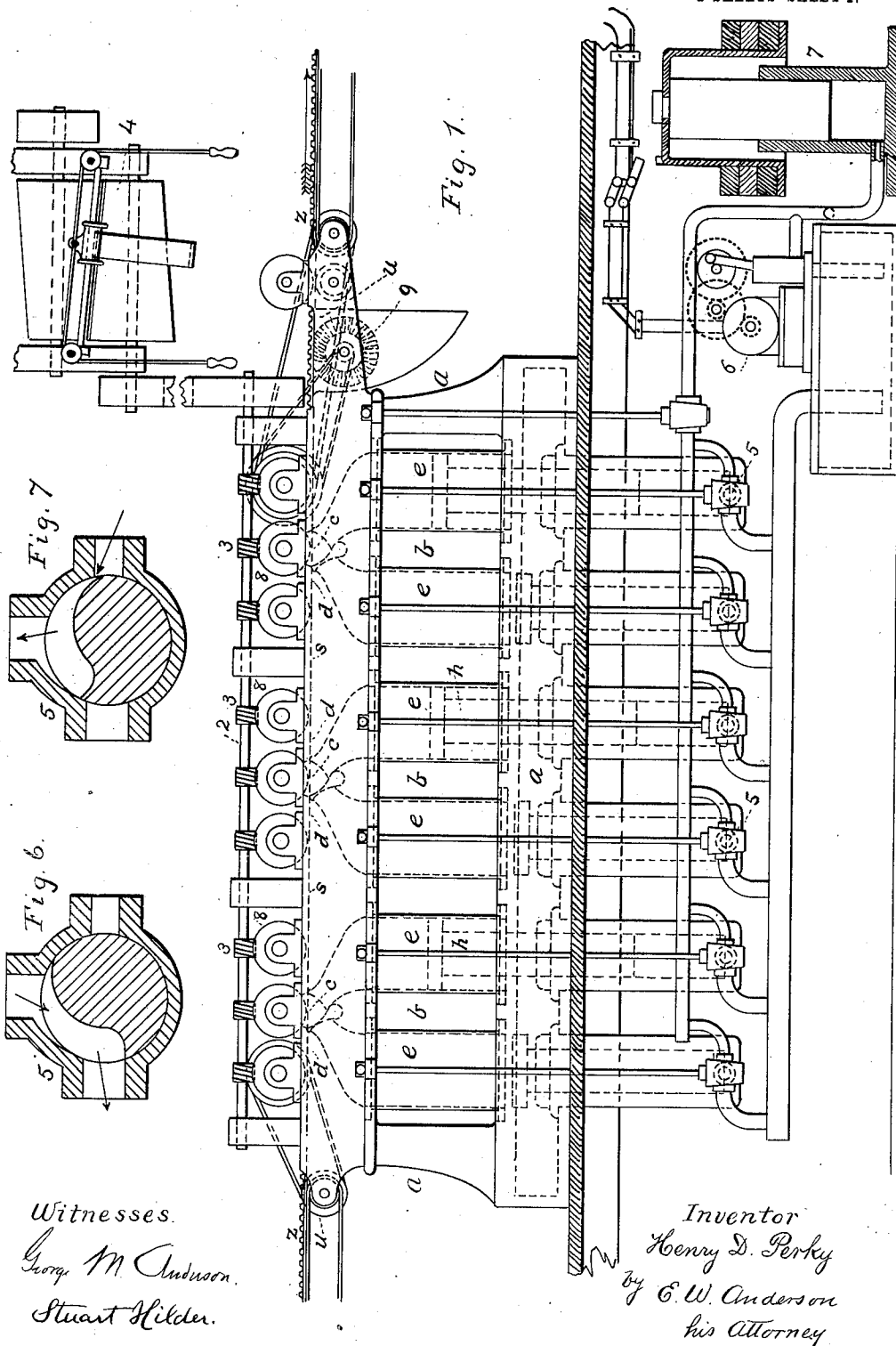


H. D. PERKY, DEC'D.
 L. SPARKS, ADMINISTRATOR.
 MACHINE FOR MANUFACTURING DIFFERENT VARIETIES OF CEREALS INTO UNITARY
 COMPOUND FORMS.
 APPLICATION FILED MAR. 13, 1906.

1,095,024.

Patented Apr. 28, 1914.

2 SHEETS-SHEET 1.



Witnesses.

George M. Anderson.
 Stuart Hilder.

Inventor

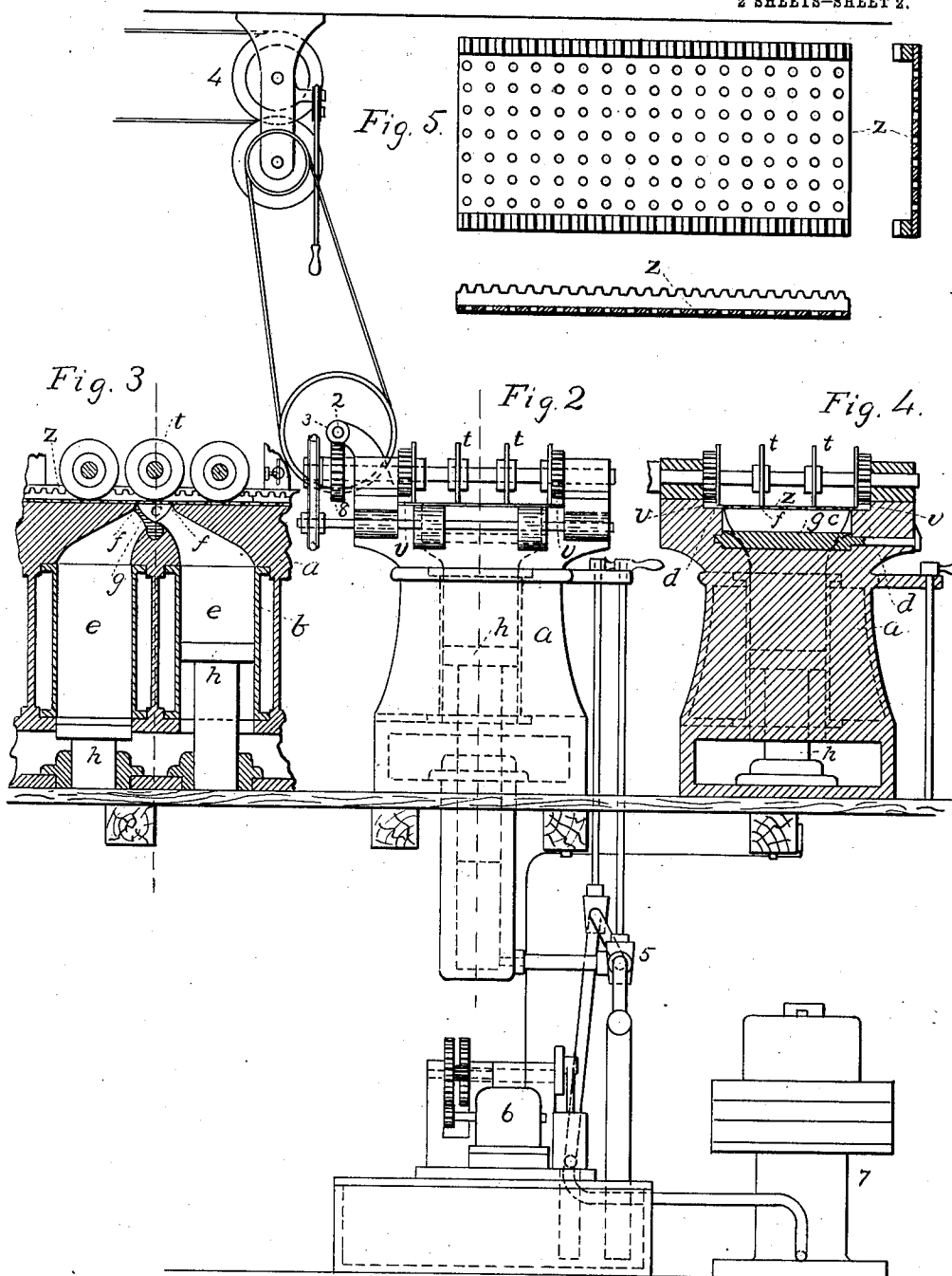
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His Attorney.

UNITED STATES PATENT OFFICE.

HENRY D. PERKY, OF GLENCOE, MARYLAND; LABAN SPARKS, ADMINISTRATOR OF SAID HENRY D. PERKY, DECEASED, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE SHREDDED WHEAT COMPANY, OF NIAGARA FALLS, NEW YORK.

MACHINE FOR MANUFACTURING DIFFERENT VARIETIES OF CEREALS INTO UNITARY COMPOUND FORMS.

1,095,024.

Specification of Letters Patent.

Patented Apr. 28, 1914.

Application filed March 13, 1906. Serial No. 305,840.

To all whom it may concern:

Be it known that I, HENRY D. PERKY, a citizen of the United States, and resident of Glencoe, in the county of Baltimore and State of Maryland, have made a certain new and useful Invention in Machines for Manufacturing Different Varieties of Cereals Into Unitary Compound Forms; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side view showing the invention. Fig. 2 is an end view. Fig. 3 is a longitudinal vertical sectional view. Fig. 4 is a transverse sectional view. Fig. 5 shows views of the perforated plate. Figs. 6 and 7, are sections of the hydraulic valve.

The object of the invention is to provide means for producing elongated composite forms of different varieties or kinds of cereal material, such forms having a sectional or jointed character, while entire in structure, and having different varieties of material respectively located in the different sections.

The invention is illustrated in the accompanying drawings in which the letter *a*, designates a frame having two or more press chambers or seats *b*, alongside and parallel to each other, and having open discharge mouths *c*, at their upper ends, said mouths opening in the same horizontal plane, and constituting bearings *d*, by means of their horizontal marginal surfaces, in the same plane, over which a plate or pan of perforated sheet metal or wire cloth is designed to pass. In the seats *b*, are placed cylinders *e*, which have been charged with material to be forced through the perforated plate, such material being usually ground grain mixed with water and cooked to hardened or solid form.

The mouth of each press seat is of rectangular character at its upper marginal portion having parallel limiting lips or edges *f*, and the distance between the lips or edges of each mouth serves as a factor

in limiting the length of one of the sections or distinct portions of the elongated form to be produced. In the drawing two press cylinders are shown in communication with each mouth, which is provided with a pivoted gate *g*, serving to close the discharge passage of one of these cylinders while the other is in operation. By this means it is designed to have a continuous feed for each press mouth, one of the pair of cylinders being held in reserve until the material of the other cylinder has been forced upward by a follower *h*, of the press. The followers of all the presses of the series may be operated to have simultaneous movement by suitable means. In the drawings, the followers are shown as parts of a hydraulic press of gang form.

The mouths *c*, of the several presses, may have their marginal surfaces or bearings *d*, connected by means of bearing surfaces *s*, of the frame which are flush with said marginal surfaces, and form therewith, and with frame extensions *u*, a path or way along which the traveling perforated plate or pan *z* moves. A feeding conveyer is designed to be arranged in connection with one of the frame extensions *u*, and a discharging conveyer is connected with the other extension. The perforated plate or pan *z*, is designed to move along the path or way over the mouths of the presses, being moved by means of gear wheels, engaging lateral teeth of each plate, as indicated at *v*. Or other practical means may be employed. During its passage across the press mouth, each plate is held down on the bearing of said mouth by a thin roller disk *t*, and when the plate reaches the end of the pathway, it may be removed and placed in a rack with its contents to be dried. The plates or pans are designed to have end contact in their passage over the press mouths.

In the operation of this machine, the different press cylinders are charged with different varieties or kinds of cereal products of about the same consistency, as, for instance with a solidified cooked product of ground yellow corn in one pair of cylinders, and a solidified cooked product of ground white corn in the pair of cylinders adjacent thereto. As the perforated plate is moved

over the press mouths through which the material of these cylinders is being forced, the edges or lips of the mouth in communication with the first pair of cylinders are designed to limit the length of the elongated forms produced by the passage of the material from these cylinders through the perforations of the plate, in a definite and uniform manner. And as the plate with the forms of the kind of material obtained in these cylinders passes over the next mouth, the material of the cylinder in communication therewith will be forced through the perforations of said plate, and will thereby adhere to and push upward the forms of the first material joining thereto the forms produced from the second material. In this manner, by the addition of other presses and cylinders in the construction of the machine, these composite forms may be made entire of three or more kinds of material. And if it be desired to make the joints or sections in the elongated forms of different lengths, this may be accomplished by using cylinders of different diameter. It is evident that variations in relative sectional length of the product may be effected by gearing up the followers independently, so that they can be moved at different speeds.

The gear wheels which move the perforated plate pans are designed to have a regulated motion, which is communicated through a differential pulley at 4, to a shaft 2, carrying pinions 3, in engagement with worm wheels 8.

The speed of each press is regulated by

means of the valve 5, of the hydraulic pipe system. By this valve the water can be admitted slowly under the follower *h*, as indicated in Fig. 7, and when the material has been pressed out of the cylinder, the follower can be quickly depressed by throwing the valve wide open, as indicated in Fig. 6.

A brush wheel 9, is employed to clean the under side of each pan as it passes off the press frame, this operation serving to facilitate the removal of the product from the pan after the forms have been dried.

Having described the invention, what I claim and desire to secure by Letters Patent is—

1. In a machine of the character described for making filaments, the combination with a plurality of press cylinders, and a series of removable traveling perforated plate pans above said cylinders, of a plurality of cut-off mouths adapted to equalize the length of the filaments, between and in contact with said cylinders and said plate pans, and means of pressure in connection with said cylinders.

2. In a machine of the class described, the combination with a series of pressure feed devices, of a moving forming plate, and means for simultaneously operating said feed devices and plate.

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

HENRY D. PERKY.

Witnesses:

WM. C. BREED,
L. S. BURBANK.