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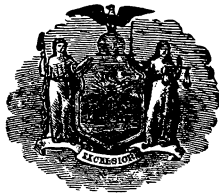
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GENEVA, N. Y.

INSPECTION OF FEEDING STUFFS, 1900-1901.

W. H. JORDAN AND C. G. JENTER.



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INSPECTION OF FEEDING STUFFS.

W. H. JORDAN AND C. G. JENTER.

SUMMARY.

The report given herewith of the inspection of feeding stuffs comprises the following:

- (1) List of brands licensed in the State of New York for the year 1901.**
- (2) Analyses of samples collected late in 1900.**
- (3) Analyses of samples collected in 1901.**
- (4) Comments on the facts shown by the inspection.**
- (5) Suggestions to dealers.**
- (6) Suggestions to purchasers.**

FEEDING STUFFS LICENSED IN 1901.

Ninety-two manufacturers have complied with the law by registering the guaranteed composition of 126 brands of feeding stuffs and paying the required license fees therefor.

The brands named in the following list are those which it has been legal to sell in New York during 1901. Doubtless these cover a very large proportion of the by-product feeding stuffs consumed in New York.

TABLE I.—MANUFACTURERS AND IMPORTERS WHO HAVE COMPLIED WITH THE NEW YORK FEEDING STUFFS LAW FOR THE YEAR 1901, WITH A LIST OF BRANDS SO GUARANTEED AND THE GUARANTEES.

License number.	Manufacturer or jobber.		Name of feed.	Guaranteed.	
	Name.	Address.		Protein.	Fat.
119	Acme Mills Co.,	Olean,	Acme feed,	<i>Per ct.</i> 9.70	<i>Per ct.</i> 4.41
163	Adikes, J. & T.,	Jamaica,	Ground feed,	8.75	3.00
122	Akron Cereal Co.,	Akron, O.,	Boss C. and O. feed,	7.94	4.18
	"	"	Royal oat feed,	8.25	4.14
128	American Cereal Co.,	Chicago, Ill.,	Quaker dairy feed,	12.03	2.50
	"	"	Victor corn and oat feed,	8.23	3.00
	"	"	Schumacher's stock feed,	10.79	3.28
	"	"	Buckeye wheat feed,	16.21	4.48
	"	"	Vim oat feed,	6.30	2.58
	"	"	X oat feed,	6.30	2.58
	"	"	American poultry feed,	13.65	3.96
88	American Cotton Oil Co.,	New York,	Prime cottonseed meal,	43.0	9.0
138	American Linseed Co.,	New York,	Oil meal, O. P.,	32-36	5-7
94	American Maltng Co.,	Detroit, Mich.,	Hominy feed,	9.89	7.06
84	American Milling Co.,	Chicago, Ill.,	Sucrene dairy feed,	16.50	3.50
104	Archer Starch Co.,	Chicago, Ill.,	Gluten feed,	25.50	3.25
170	Armour Fertilizer Works,	Chicago, Ill.,	Meat meal,	65-68	12-14
	"	"	Poultry bone,	24-26	5-6
87	Atlas Distillery,	Peoria, Ill.,	Atlas gluten meal,	36.0	11.5
89	Bagley, G. W., & Son,	Peekskill,	Mixed feed,	12.44	4.65
105	Banner Food Co.,	Auburn,	Banner stock food,	25.0	5.0
107	Barwell, J. W.,	Waukegan, Ill.,	Blatchford's calf meal,	26.0	5.0
172	Biles Co., The J. W.,	Cincinnati, O.,	Distiller's dried grains,	33.0	11.0
82	Bishopp Hominy Co.,	Sheldon, Ill.,	Hominy chop,	10.13	7.60
113	Bowker Fertilizer Co.,	Boston, Mass.,	Bowker's animal meal,	30.0	5.0
	"	"	Bowker's beef scrap,	30.0	20.0
101	Brooks-Griffiths Co.,	Minneapolis, Minn.,	Royal mixed feed,	16.61	5.48

154	Cadosia Mills,	Cadosia,	Crescent corn and oat feed,	8.34	2.60
127	Cerealine Mfg. Co.,	Indianapolis, Ind.,	Cerealine feed No. 1,	7.88	5.99
	" "	" "	" " 2,	10.82	8.03
169	" "	Buffalo,	" germ oil cake,	15.63	8.0
114	Chapin & Co.,	" "	Green diamond hominy feed,	11.0	8.0
	" "	" "	" chop feed,	10.25	3.50
95	Cleveland Milling Co., Ltd.,	Cleveland, O.,	Cottonseed meal,	43.0	9.0
	" "	" "	B chop,	9.58	5.42
141	Commercial Milling Co.,	Detroit, Mich.,	C chop,	9.13	3.27
111	Crescent Milling Co.,	Allegauy,	Dandy ground corn and oat feed	10.81	9.72
115	Crittenden, M. L.,	Buffalo,	Chop feed,	8.40	3.54
93	Crow & Williams,	Ossining,	Sterling provender,	8.82	5.55
	" "	" "	Mixed feed,	9.0	4.0
98	Darling & Co.,	Chicago, Ill.,	Beef scraps,	55-65	15-20
	" "	" "	" meal,	55-65	10-15
147	Decatur Cereal Mill Co.,	Decatur, Ill.,	Ground hominy chop,	11.83	9.18
148	Diamond Elevator and Milling Co.,	Minneapolis, Minn.,	O. O. feed,	10.51	5.75
	" "	" "	Hominy feed,	11.16	5.52
129	Diamond Mills,	Buffalo,	Diamond C. and O. feed,	9.44	4.78
134	Ellicottville Milling Co.,	Ellicottville,	Chop feed,	8.20	4.40
120 d	Ellsworth & Co.,	Buffalo,	De F _i corn and oat feed,	8.3	3.0
99	Empire Mills,	Olean,	Empire feed,	7.63	2.97
156	Evans, C. H., & Sons,	Hudson,	Malt sprouts,	28.44	0.46
164	Everett & Treadwell,	Kingston,	C. O. & W. feed,	11.50	3.50
85	Finn's, H., Sons,	Syracuse,	Ground beef cracklings,	50.68	20.66
140	Glucose Sugar Refining Co.,	Chicago, Ill.,	Chicago gluten meal,	38.0	3.2
	" "	" "	Fancy corn bran,	14.0	2.5
	" "	" "	Germ oil meal,	25.5	10.5
	" "	" "	Diamond gluten feed,	28.5	3.3
	" "	" "	Buffalo " "	28.5	3.3
	" "	" "	Davenport " "	28.5	3.3
	" "	" "	Marshalltown gluten feed,	28.5	3.3

TABLE I.—Continued.

License number.	Manufacturer or jobber.		Name of feed.	Guaranteed.	
	Name.	Address.		Protein.	Fat.
124	Harding, Geo. L., “ “	Binghamton, “	Ground beef scraps, Meat meal,	<i>Per ct.</i> 42.0	<i>Per ct.</i> 38.0
112	Hauenstein & Co.,	Buffalo,	Linseed meal, O. P.,	49.0	19.0
116	Hayt, S. T.,	Corning,	Linseed meal, O. P.,	40.96	8.65
155	Heath, H. R., & Sons,	Fort Dodge, Iowa,	Corn and oats,	10.43	4.00
167	Hodgman, W. S., & Co.,	Painted Post,	Yankee corn and oat feed,	8.96	4.33
120	H. O. Company,	Buffalo,	Corn and oat feed,	9.69	3.88
	“ “	“	H. O. Co.'s horse feed,	12.0	4.5
	“ “	“	“ “ dairy feed,	18.0	4.5
	“ “	“	“ “ poultry feed,	17.0	5.5
136	Hotton Bros.,	Portville,	Common feed,	8.38	4.85
110	Hudnut Co.,	Terre Haute, Ind.,	Hominy feed,	12.85	8.52
174	“ “	“ “	Maizeline feed,	10.42	9.03
106	Hunter Bros.,	St. Louis, Mo.,	Cottonseed meal,	43.0	9.0
	“ “	“ “	Hominy feed,	11.02	7.70
161	“ “	“ “	Linseed meal,	34.0	6.5
	“ “	“ “	Ned corn and oat chop,	9.0	5.0
125	Husted Milling and Elevator Co.,	Buffalo,	Monarch chop feed,	10.40	3.27
171	Illinois Sugar Refining Co.,	Pekin, Ill.,	Pekin gluten feed,	27.5	3.3
149	Imperial Grain and Milling Co.,	Toledo, O.,	Special hominy feed,	7.87	5.67
83	Independent Cottonseed Oil Co.,	Memphis, Tenn.,	Star brand cottonseed meal,	42-45	8-12
96	Indianapolis Hominy Mills,	Indianapolis, Ind.,	Hominy feed,	11.10	10.47
92	Kelloggs & Miller,	Amsterdam,	Linseed oil meal,	36.70	7.83
121	Kellogg, Spencer,	Buffalo,	S. K. oil meal,	37.56	6.28
108	Kentucky Milling Co.,	Henderson, Ky.,	Jersey mixed feed,	11.56	3.65
173	Knickerbocker Milling & Grain Co.,	Albany,	Champion,	9.92	4.01

159	Lapham & Parks,	Glens Falls,	Common feed,	7-5	3-25
130	Lederer, J., & Co.,	New Haven, Conn.,	Best poultry food,	51-55	10-16
175	Lowell Fertilizer Co.,	Boston, Mass.,	Bone and meat meal,	50.0	10.0
91	Mann Bros. & Co.,	Buffalo,	Oil meal,	35-15	7-05
144	Mapes, O. W.,	Middletown,	Mapes' balanced ration for poultry,	14.0	4-5
126	McCoy & Best,	Peekskill,	Evaporated bone and meat meal,	41.40	19.75
97	Miami Maize Co.,	Toledo, O.,	Hominy feed,	10.93	7-05
166	Midland Linseed Oil Co.,	Minneapolis, Minn.,	Pure O. P. ground linseed cake,	32-38	5.75-9.0
109	Mohawk Milling and Maltng Co.,	Mohawk,	Malt sprouts,	23-95	3-93
152	Mueller, E. P.,	Chicago, Ill.,	Dried grains,	23.85	6.13
	"	"	Barley, or malt, sprouts,	26.25	1.01
103	Muscatine Oat Meal Co.,	Muscatine, Ia.,	Friend's concentrated dairy feed,	10.9	3-7
143	National Starch Co.,	New York,	Gluten feed,	22.9	2-3
	"	"	King gluten meal,	35.0	3-5
158	Nester, S. K.,	Geneva,	Malt sprouts,	25.0	2.0
160	Newport Milling Co.,	Newport, Ind.,	Hominy feed,	11.4	4-74
157	Norton & Co.,	Chicago, Ill.,	Standard oat feed,	5-5	4.0
90	Oliver & Bolender,	Olean,	Chop feed,	8.13	4-59
139	Oliver, David,	Joliet, Ill.,	Durham corn and oat feed,	9.46	3-92
168	Oneonta Milling Co.,	Oneonta,	Corn and oat provender,	8.75	3-50
	"	"	Arrow corn and oat feed,	9.00	3-75
	"	"	Monarch horse feed,	13.00	5-75
133	Patent Cereals Co.,	Geneva,	Hominy feed,	11.46	9-30
146	Personius, D. V., & Son,	Waverly,	Corn and oat feed,	7.94	4-18
151	Pfeffer Milling Co.,	Lebanon, Ill.,	Hominy feed meal,	11.57	9-93
*123	Pillsbury-Washburne Flour Mills Co., Ltd.,	Minneapolis, Minn.,	Pillsbury's concentrated dairy feed,	7.09	2-85
132	Pope, Chas., Glucose Co.,	Chicago, Ill.,	Cream gluten meal,	34.12	3-20
	"	"	Corn bran,	9.44	1.60

TABLE I.—*Concluded.*

License number.	Manufacturer or jobber.		Name of feed.	Guaranteed.	
	Name.	Address.		Protein.	Fat.
150	Rankin, M. S., & Co.,	Louisville, Ky.,	Star distillers' dried grains,	<i>Per ct.</i>	<i>Per ct.</i>
176	" " "	" "	Jersey malt sprouts,	30.0	9.5
135	Rathbun-Sawyer Co.,	Oneida,	Chop feed,	26.25	1.01
153	Romaine, DeWitt,	Hackensack, N. J.,	Boiled beef and bone,	10.5-13.5	3.0-4.5
				45.0	15.0
102	Shellabarger Mill and Elevator Co.,	Decatur, Ill.,	Shellabarger's hominy feed,	11.14	9.02
137	Staples, A. S.,	Rondout,	Arcade mills mixed feed,	10.42	8.76
118	Streeter, L. L., & Sons,	Johnstown,	Common feed,	8.78	5.23
145	Suffern, Hunt & Co.,	Decatur, Ill.,	Hominy chop,	11.02	7.70
162	Terwilliger, C. A.,	Niagara Falls,	Niagara chop,	10.42	4.83
86	Toledo Elevator Co.,	Toledo, O.,	Star brand feed,	7.87	5.67
165	Union Linseed Co.,	Troy,	Cow brand oil meal,	22.09	6.32
100	U. S. Frumentum Co.,	Detroit, Mich.,	Frumentum hominy feed,	10.15	6.63
142	U. S. Sugar Refinery,	Waukegan, Ill.,	Waukegan gluten feed,	27.38	3.39
117	Victor Milling Co.,	Springville,	Golden chop,	9.17	5.84
131	Wright, M. M., & Co.,	Danville, Ill.,	Wright's hominy feed,	10.93	8.00

* Changed to "Great western concentrated dairy feed" manufactured by Great Western Cereal Co.

The above list of brands may be classified as follows :

Cottonseed-meal	4	brands.
Linseed meal	8	"
Gluten meal	4	"
Gluten feed... ..	8	"
Germ oil meal or cake.....	2	"
Malt sprouts.....	5	"
Brewer's grains.....	1	"
Distillery wastes.....	3	"
Corn bran	2	"
Hominy feed or chops.....	16	"
Meat and bone feeds (poultry mostly).....	13	"
Feeds mostly compounded from several manufacturing offals, in most cases bearing special proprietary names.	60	"
		126 brands.

The striking fact about this list is the large proportion of specially compounded feeding stuffs, the ingredients of which are in many cases standard cattle foods mixed with materials of less value.

ANALYSES OF SAMPLES OF FEEDING STUFFS COLLECTED DURING 1900-1901.

In the tables which follow may be seen the percentages of protein and fat, and in some cases of crude fiber, in the samples collected. Only determinations of protein and fat are required, but the proportion of crude fiber has been ascertained as an aid in deciding as to the use of oat hulls in a certain class of mixtures.

The number and character of the samples taken may be seen in the succeeding classified table.

TABLE II.—NUMBER AND CHARACTER OF SAMPLES.

Kind	Samples, fall of 1900.		Samples, winter 1901.	
	No. of samples.	No. of brands.	No. of samples.	No. of brands.
Cottonseed-meal.....	3	2	13	8
Linseed meal.....	7	5	12	9
Gluten meal.....	1	1	2	1
Gluten feeds.....	10	6	17	5
Germ oil meal.....	1	1	2	1
Special gluten (?).....	1	1		
Malt sprouts.....	1	1	1	1
Proprietary feeds (mixed).....	42	32	54	27
Corn bran.....	2	2	7	3
Hominy.....	15	13	18	13
Poultry foods.....	9	6	18	10
Offals from milling wheat and rye.....	11	7	16	10
Ground grains, mostly mixed corn and oats	21	21	13	13
Totals.....	124	98	173	101

SUMMARY.

Fall 1900—Manufacturers....	78	Winter 1901—Manufacturers....	70
Brands.....	98	Brands.....	101
Samples.....	124	Samples.....	173

TABLE III.—SAMPLES OF FEEDING STUFFS

Col- lec- tion No.	Name and address of manufacturer or jobber.	Sampled at
202 216 174	American Cotton Oil Co., New York, " " " " Chapin & Co., St. Louis, Mo.,	Delhi, Dean & Bramley, " Penfield Milling Co., Lockport, John T. Darrison,
165 167 181	Hauenstein & Co., Buffalo, " " " Kelloggs & Miller, Amsterdam,	Brockport, C. E. Shafer, Albion, Woods & Sprague, Mohawk, Mohawk Milling & Malting Co.,
148 169 124 131	Kellogg, Spencer, Buffalo, Mann Bros. & Co., Buffalo, Mayflower Mills, Fort Wayne, Ind., " " " "	² Lockport, James V. Rignei, Corning, W. M. Killigrew, Belmont, Hood & Bradley,
152	National Starch Co., New York,	Buffalo, National Starch Co.,
209 126 201 134 164 151 156 s40 192 217 139	Cullen, Andrew, Co., New York, Glucose Sugar Refining Co., Chicago, Ill., " " " " " " " " " " " " National Starch Co., New York, " " " " " " " " " Oneonta Milling Co., Oneonta, U. S. Sugar Refinery, Waukegan, Ill.,	Delhi, Gleason & Kiff, Hornellsville, Steph. Hollands, Delhi, Dean & Bramley, Portville, Hotton Bros., Brockport, C. E. Shafer, Buffalo, National Starch Co., Springville, B. Chaffee, Florida, Roe Bros., Ossining, Crow & Williams, Delhi, Coöperative Store Co., East Aurora, Griggs & Ball,
141	Glucose Sugar Refining Co., Chicago, Ill.,	Buffalo, Chapin & Co.,
154 215	Barwell, J. W., Waukegan, Ill., " " " "	Springville, B. Chaffee, Delhi, Penfield Milling Co.,
180	Mohawk Milling and Malting Co., Mohawk,	²
129 183 200 205 210 213 214 211 212	American Cereal Co., Chicago, Ill., " " " " Arcade Mills, Kingston, Brooks Griffith, Co., Minneapolis, Minn., " " " " " " " " Kaufmann Milling Co., St. Louis, Mo., Simpson Hendee & Co., New York, " " " "	Alfred, W. C. Burdick & Co. Roundout, F. H. Griffiths, Stamford, D. C. Hoagland, Delhi, Dean & Bramley, " Gleason & Kiff, " " " " Penfield Milling Co., " Gleason & Kiff, " " "
153 207	The H. O. Company, Buffalo, " " " "	Buffalo, Schen Bros., Delhi, Gleason & Kiff,

COLLECTED DURING THE FALL OF 1900.

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
202	Prime cotton seed meal,	<i>Per ct.</i> 45.8	<i>Per ct.</i> 43.0	<i>Per ct.</i> 9.3	<i>Per ct.</i> 9.0	<i>Per ct.</i>	\$27.00
216	" " " "	45.1	43.0	11.8	9.0		
174	Cotton seed meal,	43.2	43.0	9.1	9.0		
165	Linseed meal, O. P.,	35.6	39.62	7.8	8.53		33.00
167	" " " "	35.1	39.62	7.9	8.53		35.00
181	" oil meal,	36.1	36.70	9.4	7.83		35.00
148	S. K. oil meal,	33.7	35.94	12.8	5.04		
169	Oil meal,	36.7	35.15	7.8	7.05		32.00
124	¹ Mayflower linseed meal,	17.6	32.36	4.3	5.7	20.7	35.00
131	" " " "	16.6	32.36	4.5	5.7	22.6	
152	King g uten meal,	36.4	32.6	2.7	3.7		
209	¹ Daisy gluten feed,	19.4	—	2.5	—	8.9	19.00
126	Buffalo gluten feed,	25.6	27.0	5.6	3.3		
201	Davenport gluten feed,	26.7	27.0	5.3	3.3		22.00
134	Diamond gluten feed,	28.7	27.0	3.6	3.3		19.00
164	" " " "	26.9	27.0	2.8	3.3		21.00
151	Gluten feed,	20.9	21.2	2.7	2.9		
156	" " " "	23.1	21.2	3.3	2.9		
840	" " " "	19.0	21.2	2.4	2.9	3.9	
192	" " " "	24.2	21.2	4.0	2.9		22.00
217	¹ Special gluten,	14.8	—	3.3	—	11.7	20.50
139	Waukegan gluten feed,	26.8	27.38	3.6	3.39		20.00
141	Germ oil meal,	23.4	25.0	7.8	10.5		
154	Blatchfords' calf meal,	24.4	27.12	4.7	6.80		70.00
215	" " " "	25.3	27.12	4.6	6.80		70.00
180	Malt sprouts,	22.7	23.95	4.9	3.93		15.00
129	Buckeye wheat feed,	18.0	16.21	5.4	4.48		20.00
183	" " " "	18.3	16.21	4.8	4.48	6.7	20.00
200	³ Mixed feed,	17.1	—	10.3	—	8.8	20.00
205	Royal mixed feed,	17.4	16.61	4.9	5.48	7.0	20.00
210	" " " "	17.8	16.61	5.4	5.48		20.00
213	" " " "	16.3	16.61	4.8	5.48	9.1	20.00
214	³ Kauffmann's mixed feed,	18.3	—	4.3	—	7.3	20.00
211	Angola mixed feed,	16.8	16.61	5.0	5.48	8.1	20.00
212	" " " "	17.6	16.61	5.3	5.48	9.4	20.00
153	H. O. Co.'s dairy feed,	18.6	18.0	4.0	4.5	13.5	18.00
207	" " " "	18.1	18.0	4.3	4.5	13.5	23.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
150 178	The H. O. Company, Buffalo, " " "	Buffalo, C. E. Perry & Co., Mohawk, Mohawk Milling and Malting Co., Kingston, Everett & Treadwell, Delhi, Gleason & Kiff, Lockport, W. E. & H. K. Whicker,
196 206	" " "	Alfred, W. C. Burdick & Co., Salamanca, E. K. Abbott,
172	American Cereal Co., Chicago, Ill.,	
130 159	" " " " "	
155 218	Chapin & Co., Buffalo, Diamond Elevator and Milling Co., Minneapolis, Minn.,	Springville, B. Chaffee, Delhi, Coöperative Store Co.,
184 187 199 203	Hudnut Co., Terre Haute, Ind., Indianapolis Hominy Mills, Indianapolis, Ind., Miami Maize Co., Toledo, O., " " " "	Rondout, F. H. Griffiths, " A. S. Staples, Stamford, D. C. Hoagland, Delhi, Dean & Bramley
144 186 142 140 191 204	Oriental Flour Co., Danville, Ill., Patent Cereals Co., Geneva, Pfeffer Milling Co., Lebanon, Ill., Rodebaugh, J. H., Buffalo, Shellabarger Mill & Elevator Co., Decatur, Ill., " " " " "	Buffalo, John G. Heinold, Rondout, A. S. Staples, Buffalo, J. H. Rodebaugh, East Aurora, E. E. Godfrey, Peekskill, C. S. Horton & Sons, Delhi, Dean & Bramley,
143 197 127	U. S. Frumentum Co., Detroit, Mich., Wiedler, S. W., & Co., Cincinnati, O., Wright, M. M., & Co., Danville, Ill.,	Buffalo, J. H. Rodebaugh, Kingston, Wilson & Wolven, Hornellsville, Steph. Hollands,
173 177	Chapin & Co., Buffalo, Glucose Sugar Refining Co., Chicago, Ill.,	Lockport, John T. Darrison, Oneida, Rathbun Sawyer Co.,
137 198 128 163 168 170 121	Acme Mills Co., Olean, Akron Cereal Co., Akron, O., American Cereal Co., Chicago, Ill., "	" Kingston, Chas. F. Gray, Alfred, W. C. Burdick & Co., Brockport, C. E. Shafer, Albion, Woods & Sprague, Lockport, James D. Rignel, Corning, S. T. Hayt,
189 190 160 135 145 146 147 194 149 158 122 136 120	Bagley, G. W., & Son, Peekskill, Cerealine Mfg. Co., Indianapolis, Ind., Cleveland Milling Co., Cleveland, O., Crescent Milling Co., Allegany, Crittenden, M. L., Buffalo, " " " " " " " " Crow & Williams, Ossining, Diamond Mills, Buffalo, Ellicottville Milling Co., Ellicottville, Empire Mills, Olean, " " " " Hayt, S. T., Corning,	" Peekskill, G. W. Bagley & Son, Little Valley, Geo. W. Griffiths, " " " " " " Corning, W. M. Killigrew, " "

Col- lection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaran- teed.	Found.	Guaran- teed.		
		<i>Per ct</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	
150	H. O. Co's horse feed,	12.6	12.0	3.8	4.5	9.4	\$20.00
178	" " " "	12.3	12.0	3.8	4.5	10.9	22.00
196	" " " "	13.3	12.0	4.8	4.5	10.9	23.00
206	" " " "	12.7	12.0	3.7	4.5	8.9	22.00
172	Quaker dairy feed,	13.0	12.03	3.4	2.50	16.5	18.00
130	Schumacher's stock feed	11.4	10.79	5.2	3.28	12.1	20.00
159	" " " "	10.7	10.79	4.7	3.28	12.4	21.00
155	¹ Hominy " Mohawk,"	10.8	—	8.4	—		18.00
218	⁵ Hominy feed,	10.3	—	7.1	—		19.00
184	" "	11.0	12.85	9.2	8.52		19.00
187	" "	11.6	11.10	8.9	10.47		18.00
199	" "	10.9	10.93	10.4	7.05		20.00
203	" "	10.4	10.93	7.6	7.05		18.50
144	" "	10.8	11.06	7.0	9.85		
186	" "	12.1	11.64	9.9	8.03		18.00
142	" "	11.4	10.00	9.5	8.00		
140	⁵ " "	11.0	10.15	8.8	6.63		17.50
191	" "	11.5	10.76	10.4	8.64		19.50
204	" "	12.0	10.76	8.9	8.64		19.50
143	" "	11.8	10.15	9.9	6.63		
197	" "	11.3	9.98	9.0	8.33		18.00
127	" "	11.3	10.93	9.8	8.00		
173	⁵ Sugar corn feed,	13.1	—	3.5	—		17.00
177	" " "	13.5	13.5	3.6	3.0		
137	Acme feed	8.6	9.70	4.6	4.41	7.3	19.00
198	Corn and oat chop, No. 1,	10.8	7.94	6.7	4.18	12.1	18.35
128	Victor corn and oat feed,	8.9	8.23	3.8	3.00	10.8	18.00
163	" " " "	9.2	8.23	5.1	3.00	11.9	18.00
168	" " " "	9.2	8.23	4.6	3.00	10.6	17.50
170	" " " "	9.1	8.23	4.4	3.00	9.9	18.00
121	Vim oat feed,	5.1	6.30	1.9	2.58	29.6	16.00
189	Mixed feed,	13.3	12.44	7.0	4.65	5.8	22.00
190	Cerealine feed, No. 2,	12.4	10.31	10.1	8.62	2.4	21.00
160	¹ C. chop feed,	8.9	9.13	4.2	3.27	4.8	19.00
135	Chop feed,	8.0	8.40	3.9	3.58	8.9	18.00
145	¹ Sterling corn meal,	8.4	11.12	4.3	6.46	6.4	
146	" provender,	7.6	8.82	3.2	5.55	14.9	
147	" 999,"	10.8	10.27	3.8	4.43	11.7	
194	C. and W. mixed feed,	10.4	10.0	6.5	4.5	9.5	21.00
149	Diamond corn and oat feed,	7.9	9.44	3.2	4.78	10.6	
158	Chop feed,	8.1	10.38	4.1	4.14	8.4	18.00
122	Empire feed,	8.4	7.63	3.8	2.97	6.1	19.00
136	" "	8.2	7.63	3.8	2.97	8.1	20.00
120	Corn and oat chop feed,	11.3	10.00	5.8	4.00	8.1	19.00

Collection No.	Name and address of manufacturer or jobber.	Sampled at
193	Heath, H. R., & Sons, Fort Dodge, Ia.,	Ossining, Crow & Williams,
133	Hotton Bros., Portville,	²
195	Kentucky Milling Co., Henderson, Ky.,	Kingston, Everett & Treadwell,
179	Mohawk Milling & Malting Co., Mohawk,	²
138	Oliver & Bolender, Olean,	²
132	Phelps & Sibley, Cuba,	Friendship, Graham & Robinson
125	Sanborne & McClave, Elmira,	Hornellsville, Simmons & Howell,
185	Staples, A. S., Rondout,	²
182	Streeter, L. L., & Sons, Johnstown,	²
157	Victor Milling Co., Springville,	²
s 38	Adams, E. M., Franklinville,	²
s 42	Saunders, G. P., Dunkirk,	²
s 19	Bidleman & Rowley, Medina,	²
s 22	Gage, W. G., & Co., Fulton,	Adams, I. M. Bateman,
s 23	Osborn, W. H., Mexico,	²
s 18	Acme Mills, Olean,	²
s 10	Adams, E. M., Franklinville,	²
s 14	Amity Roller Mills, Belmont,	²
s 43	Benson, A. T., Cattaraugus,	²
s 20	Bidleman & Rowley, Medina,	²
s 24	Cleveland Milling Co., Cleveland, O.,	Salamanca, E. R. Abbott,
s 15	Dean & Spring Mfg Co., Franklinville,	²
s 21	Fitzpatrick & Weller, Ellicottville,	²
s 35	Godfrey, E. E., East Aurora,	²
s 13	Griggs & Ball, East Aurora,	²
s 11	Oliver & Bolender, Olean,	²
s 16	Saunders, G. P., Dunkirk,	²
s 41	Sowl Milling Co., Salamanca,	²
s 34	True & Young, Cattaraugus,	²
s 12	Hollands, Stephen, Hornellsville,	²
s 17	Berger, Anderson Co., Milwaukee, Wis.,	Cattaraugus, A. T. Benson.
s 39	Hollands, Stephen, Hornellsville,	²
s 36	Fitzpatrick & Weller, Ellicottville,	²
s 37	Weinhold, G., Buffalo,	Springville, Springville Roller Flour Mills,
123	American Cereal Co., Chicago, Ill.,	Corning, W. M. Killigrew,
171	" " " "	Lockport, James O. Rignel,
162	H. O. Company, Buffalo,	Dunkirk, J. W. O'Brien & Co.,
208	" " " "	Delhi, Gleason & Kiff,
119	Bowker Fertilizer Co., Boston, Mass.,	Medina, S. P. Blood & Co.,
166	" " " "	Brockport, C. E. Shafer,
175	Finn's, H., Sons, Syracuse,	²
188	McCoy & Best, Peekskill,	²
s 33	Preston Fertilizer Co., Brooklyn,	Goshen, Conklin & Cummins,

Col- lection No.	Name of feed.	Protein.		Fat.		Crude fibre found.	Price per ton.
		Found.	Guaran- teed.	Found.	Guaran- teed.		
		<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	
193	Yankee corn and oat feed,	7.1	8.96	2.5	4.33	15.6	\$18.50
133	Common feed,	10.1	8.38	5.2	4.85	9.9	18.00
195	Jersey mixed feed,	14.9	11.59	3.9	3.48	13.4	19.50
179	Corn and oat chop,	11.8	6.52	3.9	2.52	6.2	
138	Chop feed,	9.4	8.13	6.1	4.59	7.8	19.00
132	³ Corn and oat chop,	10.5		4.6		4.2	22.00
125	² Diamond mills special chop,	9.9	—	4.3	—	1.6	22.00
185	Arcade mixed feed,	11.5	10.42	5.5	5.86	6.7	18.00
182	Common feed,	8.6	8.78	3.6	5.23	7.3	19.40
157	Golden chop,	8.0	9.17	3.9	5.84	10.8	18.00
s 38	Corn meal, No. 2,	9.4		4.4		2.0	
s 42	"	10.1		3.9		1.9	
s 19	Oats, ground,	12.9		7.6		9.5	
s 22	"	11.2		3.4		9.6	
s 23	"	11.1		2.9		10.7	
s 18	Corn and oats,	9.9		5.6		3.7	
s 10	"	9.4		3.5		7.6	
s 14	"	10.1		3.3		6.0	
s 43	"	10.9		4.5		7.3	
s 20	"	10.6		6.2		4.9	
s 24	"	10.3		5.0		5.8	
s 15	"	10.3		4.7		5.5	
s 21	"	10.5		5.6		4.8	
s 35	"	12.3		3.2		6.5	
s 13	"	10.7		5.6		6.8	
s 11	"	10.5		4.1		3.4	
s 16	"	10.3		6.1		4.1	
s 41	"	11.3		3.9		4.7	
s 34	"	11.1		4.9		7.4	
s 12	¹ Chop, No. 1,	11.6		5.2		5.5	
s 17	³ Mixed feed, "Badger,"	16.8		7.1		9.0	
s 39	¹ Feed, No. 2, bran, meal and midds.	15.3		5.1		7.5	
s 36	Middlings, winter wheat,	19.8		6.1		4.6	
s 37	Flour, for feed,	13.6		1.6		0.6	
123	American poultry food,	13.1	13.65	6.8	3.96	4.1	25.00
171	"	13.3	13.65	7.2	3.96	4.8	25.00
162	H. O. Co.'s poultry feed,	17.4	17.0	5.4	5.5	5.1	30.00
208	"	17.4	17.0	5.8	5.5	5.0	30.00
119	Bowker's animal meal,	46.5	30.0	10.1	5.0		45.00
166	"	39.1	30.0	10.3	5.0		60.00
175	Ground meat and bone,	44.4	45-51	17.7	15-22		30.00
188	Evap. bone and meat meal,	39.8	41.40	16.5	19.75		30.00
s 33	Champion poultry food,	23.8	40.0	9.6	8.0		

¹ Not licensed in this State in 1900.² Sample taken at mill.³ Subject to license as marked.⁴ Bright of Wilson & Eaton, Amenia, N. Y., for

Federal Mixed Feed.

⁵ If licensed no evidence shown.

TABLE IV.—SAMPLES OF FEEDING STUFFS

Col- lec- tion No.	Name and address of manufacturer or jobber.	Sampled at
245 254	American Cotton Oil Co., Little Rock, Ark., " " " " " "	Homer, Newton & Co., Marathon, Marathon Roller Mills,
301	" " " " New York,	Binghamton, Geo. Q. Moon & Co.,
360	" " " " Helena, Ark.,	Oswego, Geo. H. Hunt,
346	Chapin & Co., St. Louis, Mo., [Tenn.,	Oxford, Byron Gray,
286	Chattanooga Cotton Oil Co., Chattanooga,	Owego, Geo. Nichols,
260	Empire Grain & Elevator Co., Binghamton,	Whitney's Point, A. F. Sanders,
326	Hunter Bros., St. Louis, Mo., [Tenn.,	Oneonta, Ford & Rowe,
352	Independent Cottonseed Oil Co., Memphis,	Norwich, H. O. Hale,
361	" " " " " "	Oswego, Geo. H. Hunt,
320	Oneonta Milling Co., Oneonta,	Sidney, Roseboom & Ingraham,
338	J. G. Fall & Co., Memphis, Tenn.,	Oneonta, Oneonta Milling Co.,
339	Booker & Gentry, " " " "	" " " " " "
222 292	American Linseed Co., New York, " " " " " "	Auburn, W. L. Noyes, Binghamton, Binghamton Pro- duce Co.,
300	" " " " " "	Binghamton, Geo. Q. Moon & Co.,
363	" " " " " "	Phoenix, A. C. Parker,
273	Dayton Milling Co., Towanda, Pa.,	Waverly, John C. Shear,
244	Empire Grain & Elevator Co., Binghamton,	Homer, Newton & Co.,
267	Hauenstein & Co., Buffalo,	Elmira, A. F. Rohmer,
284	Mann Bros. & Co., Buffalo,	Waverly, D. V. Personius & Son,
325	Midland Linseed Oil Co., Minneapolis, Minn.,	Oneonta, Ford & Rowe,
336	National Linseed Co., New York,	Oneonta, Oneonta Milling Co.,
319	Oneonta Milling Co., Oneonta,	Sidney, Roseboom & Ingraham,
373	Union Linseed Co., Troy,	Penn Yan, John Conklin & Son,
231 304	Glucose Sugar Refining Co., Chicago, Ill., " " " " " "	Cortland, S. N. Holden & Co., Binghamton, Empire Grain & Elevator Co.,
239	Glucose Sugar Refining Co., Chicago, Ill.,	Cortland, Brayton Bros.,
249	" " " " " "	Marathon, J. H. Sieber & Son,
277	" " " " " "	Waverly, John C. Shear,
283	" " " " " "	" " D. V. Personius & Son
318	" " " " " "	Walton, Smith & St. John,
357	" " " " " "	Norwich, Robert D. Eaton,
258	" " " " " "	Whitney's Pt., Henry Braman,
308	" " " " " "	Deposit, Hinman Bros.
310	" " " " " "	" " Deposit Milling Co.,
235	" " " " " "	Cortland, S. N. Holden & Co.,
288	" " " " " "	Owego, Geo. Nichols,
322	Oneonta Milling Co., Oneonta,	Sidney, Roseboom & Ingraham,
228	U. S. Sugar Refining Co., Chicago, Ill.	Cortland, I. V. Johnson,

COLLECTED DURING THE SPRING OF 1901.

Col- lec- tion No.	Name of feed.	Protein.		Fat.		Crude fibre found.	Price per ton.
		Found.	Guaran- teed.	Found.	Guaran- teed.		
		<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	
245	Cottonseed-meal, prime,	42.1	43.0	9.0	9.0		\$30.00
254	" " "	43.2	43.0	10.2	9.0		31.00
301	" "	46.6	43.0	9.5	9.0		26.50
360	" " "	45.1	43.0	9.9	9.0		27.00
346	" " "	45.0	43.0	9.4	9.0		26.00
286	" " "	44.0	—	9.8	—		26.00
260	" " " "Lily" brand,	44.6	43.0	8.5	9.0		27.00
326	" " "	43.0	43.0	9.6	9.0		24.50
352	" " " "Sunny south,"	24.1	25.0	6.2	6.0-7.0	20.0	26.00
361	" " " prime,	45.5	42-45	10.7	8-12		27.00
320	" " "	44.4	43.0	8.2	9.0		27.00
338	" " "	45.6	41-43	9.3	9-10		25.00
339	" " "	43.3	43.0	9.1	9.0		25.00
222	Oil meal, O. P.,	36.1	32-36	8.8	5-7		
292	" " "	32.3	32-36	7.7	5-7		28.75
300	" " "	34.0	32-36	7.4	5-7		30.00
363	" " "	36.6	32-36	8.1	5-7		
273	" " "	38.7	—	2.6	—		36.00
244	" " "	31.3	—	7.4	—		33.00
267	" " "	37.1	40.96	7.4	8.65		40.00
284	" " "	35.4	35.15	7.1	7.05		40.00
325	" " "	29.7	32-38	8.0	5.75-9		27.50
336	" " "	30.3	—	6.8	—		28.00
319	" " "	37.8	38-40	2.2	1-3		30.00
373	" " Cow brand,	35.4	22.09	7.5	6.32		
231	Gluten meal, Chicago	39.1	38.0	3.0	3.2		25.00
304	" " "	36.8	38.0	4.8	3.2		24.00
239	Gluten feed, Buffalo,	25.9	28.5	2.7	3.3		21.00
249	" " "	27.1	28.5	3.9	3.3		20.00
277	" " "	27.4	28.5	3.5	3.3		21.00
283	" " "	26.9	28.5	4.2	3.3		21.00
318	" " "	27.4	28.5	4.2	3.3		20.50
357	" " "	24.9	28.5	3.8	3.3		21.00
258	Gluten feed, Marshallton,	28.6	28.5	3.7	3.3		20.00
308	" " "	30.1	28.5	4.0	3.3		21.00
310	" " "	28.8	28.5	4.9	3.3		21.00
235	Gluten feed, Rockford diamond,	25.7	28.5	4.7	3.3		20.00
288	" " " " " "	27.2	28.5	4.9	3.3		20.00
322	" Gluten feed,	13.6	—	3.8	—		20.00
228	Gluten feed, Waukegan,	22.4	27.38	4.5	3.39		20.00

Col- lec- tion No.	Name and address of manufacturer or jobber.	Sampled at
242	U. S. Sugar Refining Co., Chicago, Ill.,	Homer, W. H. Darby, [Mills
252	" " " " "	Marathon, Marathon Roller
323	" " " " "	Oneonta, Ford & Rowe,
359	" " " " "	Oswego, Geo. H. Hunt,
240	Glucose Sugar Refining Co., Chicago, Ill.,	Cortland, Brayton Bros.,
340	" " " " "	Oneonta, Oneonta Milling Co.,
219	Banner Food Co., Auburn,	²
230	Barwell, J. W., Waukegan, Ill.,	Cortland, I. V. Johnson,
264	" " " " "	Elmira, D. Bevier,
276	" " " " "	Waverly, John C. Shear,
366	Nester, S. K., Geneva,	²
226	American Cereal Co., Chicago, Ill.,	Cortland, I. V. Johnson,
256	" " " " "	Whitney's Point, Homer Smith,
289	" " " " "	Owego, Geo. Nichols,
298	" " " " "	Binghamton, B. Baker,
370	" " " " "	Geneva, Geneva Coal Co.,
324	Blue River Milling Co., Edinburgh, Ind.,	Oneonta, Ford & Rowe,
241	Fish & Co., New York,	Homer, W. H. Darby,
341	Hunter Bros., St. Louis, Mo.,	Oneonta, Oneonta Milling Co.,
327	Kehlors Bros., " " "	" Morris Bros.,
367	" " " " "	Geneva, J. J. Holman,
333	National Milling Co., Toledo, O.,	Oneonta, Morris Bros.,
355	" " " " "	Norwich, Robert D. Eaton,
331	Strait, C. W., Homer,	²
232	H. O. Company, Buffalo,	Cortland, S. N. Holden & Co.,
315	" " " " "	Walton, Smith & St. John,
330	" " " " "	Oneonta, Morris Bros.,
354	" " " " "	Norwich, H. O. Hale,
293	" " " " "	Binghamton, Binghamton Pro- duce Co.,
316	" " " " "	Walton, Smith & St. John.
329	" " " " "	Oneonta, Morris Bros.,
343	Oneonta Milling Co., Oneonta,	²
251	American Cereal Co., Chicago, Ill.,	Marathon, J. H. Sieber & Son,
274	" " " " "	Waverly, John C. Shear,
306	" " " " "	Binghamton, Empire Grain & Elevator Co.,
349	" " " " "	Oxford, Byron Gray,
369	" " " " "	Geneva, Geneva Coal Co.,
237	" " " " "	Cortland, S. N. Holden & Co.,
353	" " " " "	Norwich, H. O. Hale,
368	" " " " "	Geneva, Geneva Coal Co.,
248	American Malting Co., Detroit, Mich.,	Marathon, J. H. Sieber & Son,
234	Chapin & Co., St. Louis, Mo.,	Cortland, S. N. Holden & Co.

Col- lec- tion No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaran- teed.	Found.	Guaran- teed.		
242	Gluten feed, Waukegan,	<i>Per ct.</i> 27.0	<i>Per ct.</i> 27.38	<i>Per ct.</i> 4.2	<i>Per ct.</i> 3.39	<i>Per ct.</i>	\$20.00
252	" " "	27.1	27.38	4.3	3.39		20.00
323	" " "	27.3	27.38	5.1	3.39		20.40
359	" " "	26.9	27.38	6.2	3.39		22.00
240	Germ oil meal,	23.9	25.5	8.6	10.5		28.00
340	" " "	21.1	25.5	12.0	10.5		22.00
219	Banner stock food,	26.9	25.0	6.6	5.0	12.2	160.00
230	Blatchford's calf meal,	25.1	26.0	5.0	5.0		70.00
264	" " "	24.4	26.0	5.4	5.0		70.00
276	" " "	25.8	26.0	5.5	5.0		70.00
366	Malt sprouts,	26.6	25.0	4.1	2.0		15.00
226	Buckeye wheat feed,	17.3	16.21	4.9	4.48		20.00
256	" " "	15.7	16.21	5.2	4.48		19.75
289	" " "	18.1	16.21	4.9	4.48		20.00
298	" " "	18.3	16.21	4.9	4.48		20.00
370	" " "	16.7	16.21	5.1	4.48		
324	³ Mixed feed,	17.3	—	5.4	—	7.8	
241	³ " " " "Rex,"	17.5	—	4.9	—	8.2	
341	³ " " " "Excelsior,"	17.3	—	5.0	—	8.2	
327	³ " " "	17.3	—	5.3	—	8.6	21.00
367	³ " " "	16.7	—	5.1	—	8.2	21.50
333	³ Delaware feed,	17.0	—	4.9	—	7.4	21.00
355	" " "	16.9	—	5.4	—	7.6	20.00
831	Bran and middlings,	15.6	—	4.9	—	7.6	
232	H. O. Co.'s dairy feed,	19.4	18.0	4.9	4.5	13.0	20.00
315	" " "	18.7	18.0	4.7	4.5	11.9	23.00
330	" " "	18.8	18.0	4.7	4.5	12.0	21.50
354	" " "	18.1	18.0	4.8	4.5	11.8	21.00
293	H. O. Co.'s horse feed,	12.3	12.0	4.2	4.5	9.6	22.00
316	" " "	13.2	12.0	4.1	4.5	9.1	22.00
329	" " "	13.2	12.0	4.0	4.5	9.6	21.50
343	Monarch horse feed,	13.2	13.0	5.3	5.75	8.5	23.00
251	Quaker dairy feed,	14.1	12.03	3.6	2.50	15.5	18.00
274	" " "	14.4	12.03	4.0	2.50	15.0	18.00
306	" " "	14.7	12.03	3.9	2.50	15.9	17.00
349	" " "	13.4	12.03	3.6	2.50	15.2	18.00
369	" " "	12.8	12.03	4.1	2.50	16.5	18.00
237	Schumacher's stock feed,	11.5	10.79	5.4	3.28	11.5	20.00
353	" " "	11.6	10.79	5.0	3.28	11.8	20.00
368	" " "	11.2	10.79	4.2	3.28	11.1	20.00
248	Hominy feed,	10.4	9.89	8.6	7.06		18.00
234	" " green diamond,	10.1	11.0	8.2	8.0		19.00

Col- lec- tion No.	Name and address of manufacturer or jobber.	Sampled at
347	Chapin & Co., St. Louis, Mo.,	Oxford, Byron Gray,
225	Clapp, Arthur Jerome, New York,	Cortland, C. O. Smith,
243	Cox, C. M., & Co., Geneva,	Homer, Newton & Co.,
238	Empire Grain & Elevator Co., Binghamton,	Cortland, Brayton Bros.,
255	" " " "	Whitney's Point, Homer Smith,
259	" " " "	" " Henry Brame,
302	Hudnut Company, Terre Haute, Ind.,	Binghamton, Empire Grain & Elevator Co.,
328	" " " "	Oneonta, Morris Bros.,
247	Indianapolis Hominy Mills, Indianapolis, Ind.,	Homer, Paul Billings & Co.,
335	Miami Maize Co., Toledo, O.,	Oneonta, Oneonta Milling Co.,
365	Patent Cereals Co., Geneva,	
356	Rodebaugh, J. H., Buffalo,	Norwich, Robert D. Eaton,
299	Seymore & Co., Buffalo,	Binghamton, Geo. Q. Moon & Co.,
309	Shellabarger Mill & Elevator Co., Decatur, Ill.,	Deposit, Deposit Milling Co.,
321	" " " "	Sidney, Roseboom & Ingraham,
305	Suffern Hunt & Co., Decatur, Ill.,	Binghamton, Empire Grain & Elevator Co.,
236	Glucose Sugar Refining Co., Chicago, Ill.,	Cortland, S. N. Holden & Co.,
250	" " " "	Marathon, J. H. Sieber & Son,
253	" " " "	Marathon, Marathon Roller Mills,
280	" " " "	Waverly, D. V. Personius & Son,
334	" " " "	Oneonta, Oneonta Milling Co.,
358	" " " "	Norwich, Robert D. Eaton,
282	Personius, D. V., & Son, Waverly,	
371	Adikes, J. & T., Jamaica,	
337	Akron Cereal Co., Akron, O.,	Oneonta, Oneonta Milling Co.,
221	American Cereal Co., Chicago, Ill.,	Auburn, W. L. Noyes,
233	" " " "	Cortland, S. N. Holden & Co.,
257	" " " "	Whitney's Point, Homer Smith,
294	" " " "	Binghamton, Binghamton Pro- duce Co.,
307	" " " "	Binghamton, Geo. Q. Moon & Co.,
362	" " " "	Oswego, Geo. H. Hunt,
270	" " " "	Corning, S. T. Hayt,
281	" " " "	Waverly, D. V. Personius & Son,
246	Billings, Paul, & Co., Tunkhannock, Pa.,	Homer, Paul Billings & Co.,
261	Cerealine Mfg. Co., Indianapolis, Ind.,	Whitney's Point, A. F. Sanders,
350	" " " "	Oxford, French & Mead,
372	" " " "	Goshen, H. B. Knight & Co.,
348	Chester Mills, New York,	Oxford, Byron Gray,
272	Dayton Milling Co., Towanda, Pa.,	Waverly, John C. Shear,
828	" " " "	" " " "
220	Diamond Mills, Buffalo,	Auburn, W. L. Noyes,
266	" " " "	Elmira, John Livens,

Col- lec- tion No.	Name of feed.	Protein.		Fat.		Crude fibre found.	Price per ton.
		Found.	Guaran- teed.	Found.	Guaran- teed.		
		<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	
347	Hominy feed, green diamond,	10.5	11.0	8.5	8.0		\$18.00
225	" " meal, pop corn,	11.7	—	10.4	—	4.6	19.00
243	" " "	10.4	—	8.5	—		18.50
238	" " "	11.7	—	9.7	—		20.00
255	" " "	10.9	—	8.0	—		20.00
259	" " "	10.3	—	6.4	—		19.00
302	Hominy feed,	11.3	12.85	7.7	8.52		18.75
328	" "	10.2	12.85	7.7	8.52		18.50
247	" "	12.4	11.10	10.0	10.47		19.00
335	" "	10.5	10.93	7.9	7.05		18.00
365	" "	10.9	11.46	10.0	9.30		17.00
356	" " "	10.8	—	9.7	—		18.50
299	" " "	10.7	—	7.9	—		20.00
309	" "	11.1	11.14	9.6	9.02		18.00
321	" "	13.4	11.14	9.3	9.02		18.00
305	" "	11.1	11.02	9.1	7.70		18.75
236	Sugar corn feed,	14.6	14.0	4.7	2.5	11.1	18.00
250	Fancy corn bran,	12.4	14.0	4.3	2.5	11.6	18.00
253	" " "	11.1	14.0	4.3	2.5	10.7	17.00
280	Sugar corn feed,	13.3	14.0	4.6	2.5		
334	" " "	14.0	14.0	3.9	2.5		18.00
358	Fancy corn bran,	12.8	14.0	5.0	2.5		17.50
282	" Sugar corn feed,	11.9	—	6.6	—		17.00
371	Ground feed,	9.1	8.75	3.2	3.00	6.7	19.60
337	Royal oat feed,	6.3	8.25	2.7	4.14	25.4	16.00
221	Victor corn and oat feed,	8.3	8.23	3.6	3.00	9.3	18.00
233	" " "	8.8	8.23	3.1	3.00	11.4	17.00
257	" " "	9.6	8.23	4.7	3.00	7.6	19.00
294	" " "	9.1	8.23	4.2	3.00	7.3	19.00
307	" " "	7.8	8.23	3.1	3.00	11.8	
362	" " "	9.0	8.23	5.5	3.00	9.4	18.00
270	Vim oat feed,	7.4	6.30	3.0	2.58	22.7	15.00
281	" " "	4.6	6.30	1.7	2.58	28.9	
246	" Oat feed,	1.7	—	1.4	—	30.7	16.00
261	Cerealine feed, No. 2,	11.4	10.82	7.8	8.03	2.2	19.00
350	" " "	11.4	10.82	7.8	8.03	2.1	18.00
372	Cerealine germ oil cake,	17.4	15.63	12.6	8.00		24.00
348	" Chester stock food,	6.9	11.5	2.7	4.2	11.5	19.00
272	" Chop, No. 2,	9.4	—	4.0	—	4.4	18.00
828	" " "	9.6	—	4.3	—	5.1	21.00
220	Diamond C. and O. feed,	6.6	9.44	3.2	4.78	15.2	18.00
266	" " "	6.8	9.44	3.4	4.78	12.1	18.00

Col lec- tion No.	Name and address of manufacturer or jobber.	Sampled at
271	Diamond Mills, Buffalo,	Corning, C. F. Brown,
312	" " " "	Hancock, E. E. Hackett & Co.
269	Hayt, S. T., Corning,	"
291	Heath, H. R., & Sons, Fort Dodge, Ia.,	Binghamton, A. J. Smith & Son,
303	" " " "	" Empire grain and Elevator Co.,
364	" " " "	Phoenix, A. C. Parker,
265	Husted Milling and Elevator Co., Buffalo,	Elmira, F. S. Knapp,
314	Keery, Thomas (Cadosia Mills), Hancock,	"
268	Kentucky Milling Co., Henderson, Ky.,	Elmira, H. F. Rohmer,
351	" " " "	Oxford, French & Mead,
290	Muscatine Oat Meal Co., Muscatine, Ia.,	Owego, Gilbert Truman & Son,
342	Oneonta Milling Co., Oneonta,	"
344	" " " "	"
279	Personius, D. V., & Sons, Waverly,	"
311	Rathbun-Sawyer Co, Oneida,	Hancock, E. E. Hackett & Co.,
317	" " " "	Walton, Smith & St. John,
s 27	American Cereal Co., Chicago, Ill.,	Oswego, Geo. H. Hunt,
s 8	Atlas Mills, Phoenix,	"
s 29	Barnum, S. D., Waverly,	"
s 3	Cadosia Mills, Hancock,	"
s 4	Cedar Falls Milling Co., Cedar Falls, Ia.,	Oswego, James Dunlap,
s 30	Darby, W. H., Homer,	"
s 26	Deposit Milling Co., Deposit,	"
s 6	Eaton, R. D., Norwich,	"
s 9	Fernbaugh Mills, Dresden,	Geneva, L. C. Davison,
s 7	French & Mead, Oxford,	"
s 1	Husted Milling and Elevator Co., Buffalo,	Norwich, H. O. Hale,
s 5	Pierce & Pendergast, Phoenix,	"
s 25	Barnum, S. D., Waverly,	"
s 32	Berger-Anderson Co., Milwaukee, Wis.,	Cortland, S. N. Holden & Co.,
s 2	Oneonta Milling Co., Oneonta,	Sidney, Roseboom & Ingraham,
227	American Cereal Co., Chicago, Ill.,	Cortland, I. V. Johnson,
278	" " " "	Waverly, John C. Shear,
287	" " " "	Owego, Geo. Nichols,
332	" " " "	Oneonta, Morris Bros.,
313	H. O. Company, Buffalo,	Hancock, Wm. A. Hall,
331	" " " "	Oneonta, Morris Bros.,
295	Mapes, O. W., Middletown,	Binghamton, Binghamton Pro- duce Co.,
275	Bowker Fertilizer Co., Boston, Mass.,	Waverly, John C. Shear,
374	" " " "	West Winfield, H. W. Berry,
375	" " " "	Sprout Brook, A. E. Ostrom,
224	Finn's, H., Sons, Syracuse,	"
223	" " " "	Auburn, W. L. Noyes,
285	Flour City Plant Food Co., Rochester,	Owego, Geo. Nichols,
262	Harding, Geo. L., Binghamton,	Whitney's Point, A. F. Sanders,
296	" " " "	"
297	" " " "	"
263	Preston Fertilizer Co., Brooklyn,	Elmira, D. Bevier,
229	Romaine, DeWitt, Hackensack, N. J.,	Cortland, I. V. Johnson,

Collection No.	Name of feed.	Protein.		Fat.		Crude fiber found.	Price per ton.
		Found.	Guaranteed.	Found.	Guaranteed.		
		Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
271	Diamond C. and O. feed,	6.8	9.44	2.8	4.78	13.5	\$18.00
312	“ “ “ “	7.9	9.44	3.7	4.78	12.5	18.00
269	Corn and oats,	9.6	10.43	4.2	4.00	8.5	18.00
291	Yankee corn and oat feed,	6.3	8.96	2.3	4.33	18.7	
303	“ “ “ “	6.8	8.96	2.4	4.33	17.3	16.50
364	“ “ “ “	7.5	8.96	3.2	4.33	15.1	18.00
265	Monarch chop feed,	7.9	10.40	3.4	3.27	8.3	19.00
314	Crescent corn and oat feed,	8.5	8.34	3.9	2.60	11.8	18.50
268	Jersey mixed feed,	13.4	11.56	3.8	3.65	13.4	20.00
351	“ “ “ “	11.8	11.56	3.9	3.65	13.2	20.00
290	Friends concentrated dairy feed,	7.7	10.9	3.2	3.7	23.5	15.50
342	Arrow corn and oat feed,	9.0	9.00	4.5	3.75	5.4	19.00
344	Corn and oat provender,	9.3	8.75	4.7	3.50	10.7	18.00
279	Corn and oat feed,	8.2	7.94	2.6	4.18	7.1	20.00
311	Oneida chop feed,	9.4	10.5-13.5	5.1	3.0-4.5	8.2	18.00
317	3 “ buckwheat feed,	19.7	—	5.7	—	24.4	14.00
s 27	Ground oats (calf meal),	16.9		8.6		2.0	
s 8	Corn and oats,	11.4		3.8		7.5	
s 29	“ “ “	9.5		1.4		3.3	
s 3	“ “ “	9.8		2.2		3.1	
s 4	“ “ “	11.6		5.0		6.4	
s 30	“ “ “	10.0		1.7		5.1	
s 26	“ “ “	11.1		1.8		5.9	
s 6	“ “ “	10.6		3.6		4.7	
s 9	“ “ “	11.2		4.5		6.1	
s 7	“ “ “	10.4		4.5		4.6	
s 1	“ “ “	9.9		3.1		4.1	
s 5	“ “ “	10.6		2.3		7.2	
s 25	Buckwheat, corn and oats,	9.4		1.5		5.4	
s 32	Badger bran,	14.3		3.7		7.7	
s 2	Rye feed,	14.8		4.0		6.0	
227	American poultry food,	13.9	13.65	7.4	3.96	4.7	25.00
278	“ “ “	12.9	13.65	5.5	3.96		26.00
287	“ “ “	12.8	13.65	7.1	3.96	4.3	25.00
332	“ “ “	14.5	13.65	6.3	3.96	4.8	26.00
313	H. O. poultry feed,	17.4	17.0	5.7	5.5	4.9	30.00
331	“ “ “	17.2	17.0	5.7	5.5	5.3	28.00
295	Mapes balanced ration for poultry,	12.9	14.0	4.1	4.5	3.7	30.00
275	Bowker's animal meal,	25.2	30.0	16.8	5.0		52.00
374	“ “ “	39.4	30.0	8.9	5.0		
375	“ “ “	33.9	30.0	21.8	5.0		
224	Ground beef cracklings,	42.2	50.68	19.4	20.66		30.00
223	“ “ “	44.0	50.68	19.2	20.66		45.00
285	1 Excelsior meat meal for poultry,	35.1		13.5			45.00
262	Fresh ground beef scraps,	44.4	42.0	18.4	38.0		50.00
296	“ “ “ “	40.3	42.0	30.9	38.0		45.00
297	Meat meal for poultry,	66.2	49.0	19.5	19.0		40.00
263	1 Champion meat meal for poultry,	41.4	40.0	11.5	8.0		50.00
229	Boiled beef and bone,	47.2	45.0	18.7	15.0		45.00

¹ Not licensed in this State.

² Sample taken at mill.

³ Subject to license as marked.

⁴ If licensed, no evidence shown.

COMMENTS.

It is gratifying to note that the unmixed, or what may perhaps properly be termed, the standard, feeding stuffs, such as cottonseed and linseed oil meals, the gluten meals and feeds, the brewer's residues and hominy feeds, are of uniformly good quality and are practically as good as the guarantees. The only important instance of inferior quality in these classes of goods is the case of Mayflower Linseed Meal manufactured by the Mayflower Mills, Fort Wayne, Ind. It is believed that this brand has been withdrawn from the market. It is clearly fraudulent in character, as the protein was only about half the proportion represented to be present.

The most numerous discrepancies between guarantees and actual composition occur with the mixed goods of which oat hulls are undoubtedly a component. These are the goods which in many instances bear such brand names as "chop feed," "corn and oat feed," "mixed feed," etc., which lead the purchaser to conclude that the mixtures are made up of corn and oats. They have the appearance of being corn and oats, because corn meal or hominy feed and oat hulls are present. The protein guaranteed is usually less than 10 per ct., often less than 9 per ct. and in some brands less than 8 per ct., but even these low percentages are not always maintained because of an evident overdose of the worthless oat hulls.

The prominence of oat hulls in some of these mixtures is seen in the large proportion of fibre which they carry. The only grain product which supplies fibre generously is oat hulls, and when a mixture containing a considerable proportion of corn meal or hominy feed shows 12 per ct. of fiber and upwards, it is safe to conclude that oat hulls have been introduced. The same is true often when the fiber is less than 12 per ct. Attention is invited to the percentages of fiber given in the preceding tables.

Many genuine mixtures of corn and oats are sold. These seem to be more abundant, that is, they constitute a larger pro-

portion of the "chop feeds" found in the market, than was the case when the Station first began to collect samples of this class of goods. The genuineness of these mixtures is seen in part in the low proportion of fiber which ranges between 3 per ct. and 7 per ct., and in part in their general appearance. The presence of ground oat hulls is made evident by a characteristic mechanical condition and negatively by the absence of the crushed oat grains. It would not be difficult for farmers to so educate their eyes as to easily detect inferior oat hull mixtures.

It is claimed, probably for good reason, that much of the corn meal sold in the State is mixed with hominy feed. While such a mixture is little, if any, inferior in feeding value to pure corn meal, the purchaser generally sustains financial injury, because if he wishes for hominy feed he can usually purchase it at a less price than that paid for the fraudulent corn meal. These corn meal and hominy mixtures are lighter in color than pure, yellow corn meal. Proof that this lighter color is not caused by grinding in white corn is difficult, because chemically and microscopically hominy feed is very similar to the maize grain of which it was once a part.

It is fair to conclude, also, that the by-products from the manufacture of starch are used to mix with corn meal whenever they cost less than the latter. This fact was made evident at a public hearing before a committee of the New York legislature at the time legislation concerning the sale of feeding stuffs was pending. Very recently a jobber in feeding stuffs located in New York has issued a circular to millers advising them how they can "make corn meal" "in order to meet competition" by mixing corn bran with corn meal in the proportion of one to five.

Without discussing here the question of the relative value of corn meal and the mixture, this practice, when not clearly understood, is a dishonest imposition upon the consumer, because if he wishes for corn bran in his ration he can buy it for less money than he can corn meal. Moreover, any miller who fraudulently descends to such unworthy means of sustaining his trade becomes legally liable to a fine.

One of the most frequent violations of the feeding stuff law is the failure of dealers to have in their possession the proper state-

ment of the source and composition of licensed goods stored and sold in bulk. Licensed brands stored and sold in the manufacturer's sacks are usually properly marked. Because a brand is licensed the dealer handling it in bulk is not excused from the requirement of furnishing to the consumer the statement required by law. It should be entirely easy to secure such a statement from the manufacturer or jobber and there is no good reason for failing in this particular.

The sale of the offals from milling wheat has also required some attention. It is customary with many mills to run together all the offals, bran, middling, etc., and sell this mixture under the term "mixed feed."

The requirements of the feeding stuff law do not apply to bran and middlings from wheat, rye and buckwheat *when sold as such* and it has been necessary to rule that these cannot be sold in a mixed condition under the simple term "mixed feed" without complying with the provisions of the law, but must be labeled, if labeled at all, as pure bran and middlings.

For the information of dealers who desire to be law-abiding and avoid the responsibility of doing business illegally, the following list is given of goods either not licensed, or if licensed, without evidence of the same appearing as they were found in the hands of dealers.

The goods in this list should be avoided until they are placed on the market legally.

BRANDS TO BE AVOIDED BECAUSE OF NOT HAVING A LEGAL STANDING
IN THIS STATE OR ELSE SOLD WITHOUT FULL COMPLIANCE WITH
THE LAW.

Name.	Manufacturer or jobber.
* Cottonseed-meal,	Chattanooga Cotton Oil Co., Chattanooga, Tenn.
* Cottonseed-meal, Lily brand,	Empire Grain & Elevator Co., Binghamton, N. Y.
* Cottonseed-meal, Sunny South brand,	Independent Cotton Oil Co., Memphis, Tenn.
† Cottonseed-meal,	Oneonta Milling Co., Oneonta, N. Y.
* " " "	J. G. Fall & Co., Memphis, Tenn.
* " " "	Booker & Gentry, Memphis, Tenn.
* Mayflower linseed meal,	Mayflower Mills, Fort Wayne, Ind.,
* Linseed meal, O. P.,	Dayton Milling Co., Towanda, Pa.
† " " "	Empire Grain & Elevator Co., Binghamton, N. Y.
* " " "	National Linseed Co., New York, N. Y.
† " " "	Oneonta Milling Co., Oneonta, N. Y.
† Gluten feed,	Oneonta Milling Co., Oneonta, N. Y.
* Special gluten,	Oneonta Milling Co., Oneonta, N. Y.
* Daisy gluten feed,	Andrew Cullen Co., New York, N. Y.
* Popcorn hominy,	{ Arthur Jerome Clapp & Co., New York, N. Y., or John W. Metzler, Binghamton, N. Y.
* Hominy feed,	
† " " "	C. M. Cox & Co., Geneva, N. Y.
† " " "	Empire Grain & Elevator Co., Binghamton, N. Y.
† " " "	J. H. Rodebaugh, Buffalo, N. Y.
† Sugar corn feed,	Seymore & Co., " "
† Oat feed,	D. V. Personius & Son, Waverly, N. Y.
* Chester stock food,	Paul Billings & Co., Homer, N. Y.
* Chop No. 2,	Chester Mills, New York, N. Y.
* Excelsior meat meal for poultry,	Dayton Milling Co., Towanda, Pa.
* Champion meat meal for poultry,	Flower City Plant Food Co., Rochester, N. Y.
† Rex mixed feed,	Preston Fertilizer Co., Brooklyn, N. Y.
† Excelsior mixed feed,	Fish & Co., New York, N. Y.
† Delaware feed,	Hunter Bros., St. Louis, Mo.,
	National Milling Co., Toledo, O.

* Not licensed in 1901.

† If licensed, no evidence shown by dealer.

‡ Should be marked properly. Not legally sold under brand name used.

SUGGESTIONS TO DEALERS.

In this bulletin may be found a list of brands of feeding stuffs licensed for 1901. In the main the same brands will probably be licensed for 1902, doubtless with some additions. These include every variety of commercial cattle foods which farmers and stable keepers ever need to purchase outside of the entire cereal grains, which are not subject to the provisions of the law.

The manufacturers or jobbers who have paid license fees and filed the required guarantees have made it possible for dealers to handle their goods safely and with certain assurances as to character and quality, and therefore they are the ones who are entitled to patronage.

Dealers should require that when goods are handled in packages the proper marks are affixed :

Name and address of manufacturer or jobber.

Name of brand.

Guaranteed percentage of protein.

Guaranteed percentage of fat.

If the goods are bought in bulk, then the manufacturer or jobber should be asked to furnish the same statement for display to customers. This is a simple matter but it should be attended to in order to avoid any possible chance of action by the State and as a matter of justice to consumers.

SUGGESTIONS TO CONSUMERS.

There appears to be a growing tendency on the part of consumers to purchase proprietary brands of feeding stuffs that are mixtures of two or more by-products. Many of these mixtures are compounded for the purpose of providing a medium in which inferior waste products lose their identity by mixing them with materials of good and well recognized quality. For instance, an "oat feed" may contain hominy feed, oat hulls and sometimes enough of some material rich in protein, perhaps gluten meal, to bring the protein content of the mixture up to a desirable proportion. Such a mixture is worth commercially what the hominy feed and gluten meal would cost and no more. If 20 per ct. of oat hulls are present then the price of the mixtures should be 20 per ct. less than what a full ton of the hominy feed and gluten meal mixture would cost. Oat hull mixtures are not an imposition on the consumer, provided they are sold at a price proportional to the standard materials which the mixtures contain, otherwise they are bought at a loss. As a matter of fact, these mixtures are sold at about the prices which rule for feeding stuffs of standard grade.

A glance at the previous tables will show the following range of prices :

Proprietary mixed goods.....	\$17.50 to \$24.00	per ton.
Gluten meal.....	24.00 to 25.00	“
Gluten feeds.....	20.00 to 22.00	“
Hominy feeds.....	17.50 to 19.50	“
Sugar corn feed (corn bran mostly)..	17.00 to 18.00	“
Malt sprouts.....	15.00	
Mixed wheat offals.....	20.00 or less.	

These figures show conclusively that the proprietary mixed goods containing 20 per ct. and upward of oat hulls are bought at a loss of generally not less than \$5.00 per ton and doubtless often more. If farmers foolishly think that it is desirable to have in the grain mixture some fibrous material like oat hulls, let them hire someone to grind up their straw stacks or the mows of poor hay and mix the good grain with these. It is pitiful to see farmers of limited means paying grain prices for an ingredient in certain commercial cattle foods which is worth no more than the poorest coarse fodders around the barn. Such costly business management seems to be the fruit of either wilful ignorance or a lazy indifference.

The manufacturer who uses oat hulls in such a way as to deceive his customers is simply dishonest.

One of the most glaring impositions discovered is the case of sample 246, representing an "oat feed" found on sale at Homer. The oat feed (?) contained only 1.7 per ct. of protein and over 30 per ct. of fiber. It was nothing but oat hulls. The selling price was \$15.00 per ton ! Comment is unnecessary.

The wise course for farmers to pursue is to purchase either standard by-product feeding stuffs or the entire grains, such as corn and oats, whole or ground. At \$1.00 per hundred for corn meal and \$0.40 per bushel for oats, a mixture of equal parts by weight of these two grains can be secured at no greater price than what is asked for certain oat feeds. If hominy feed is used in place of the corn meal the cost would be lessened.