

State of Iowa

1923

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TWELFTH ANNUAL REPORT

of

STATE FIRE MARSHAL

FOR THE YEAR 1922

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J. A. TRACY

State Fire Marshal

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THE STATE OF IOWA  
Des Moines

LETTER OF TRANSMITTAL

Des Moines, Iowa, February 15, 1923.

HON. N. E. KENDALL, *Governor of Iowa*:

Sir:—In compliance with the provisions of law I have the honor to submit herewith the twelfth annual report of the affairs of this office covering the period beginning January 1, 1922, and ending December 31, 1922, both dates included.

J. A. TRACY, *State Fire Marshal*.

STATE FIRE MARSHAL

Appointed by the Governor. Term, Four Years. Expires July 1, 1923.

| Office                 | Name              | Legal Residence | Birthplace |
|------------------------|-------------------|-----------------|------------|
| Fire Commissioner      | J. A. Tracy       | Sioux City      | Iowa       |
| Deputy                 | E. J. Froucek     | Des Moines      | Iowa       |
| Assistant Deputy       | W. C. Rabbitt     | Des Moines      | Indiana    |
| Assistant Deputy       | J. C. Milner, Jr. | Belle Plaine    | Iowa       |
| Stenographer and Clerk | Laura M. Pedersen | Des Moines      | Illinois   |

The entire expense of the State Fire Marshal's office is paid out of the general revenues of the state.

## TWELFTH ANNUAL REPORT STATE FIRE MARSHAL

For the year 1922, 5,553 fires were reported to this office totalling a loss of \$10,151,011. The property involved in these fires was valued at \$63,000,000.

This is an increase of 784 fires and an increase of \$542,866 loss over 1921.

There were 447 adjoining fires (which are included in the 5,553) totalling a loss of \$1,310,716. The 447 fires caught from the rooms or place where the first fire originated.

The per capita fire loss in the state of Iowa during 1922 was \$4.22, which is an increase of 23 cents over 1921.

During the year 1922, twelve fires occurred in each of which the loss exceeded \$90,000 as follows:

|          |                     |           |
|----------|---------------------|-----------|
| Jan. 3   | Centerville         | \$ 96,040 |
| Feb. 14  | Iowa City           | 90,058    |
| Feb. 16  | Fort Dodge          | 181,180   |
| Feb. 22  | Atlantic            | 97,000    |
| March 3  | Fort Madison (near) | 253,788   |
| March 29 | Davenport           | 244,000   |
| April 19 | Des Moines          | 140,549   |
| May 9    | Des Moines          | 155,631   |
| June 21  | Waterloo            | 271,323   |
| Sept. 23 | Fort Dodge          | 145,533   |
| Dec. 16  | Ames                | 289,000   |
| Dec. 23  | Council Bluffs      | 205,554   |

Total .....\$2,169,656

There were also fourteen (14) fires during 1922 in each of which the loss exceeded \$50,000, totalling a loss of \$953,313. The loss in these twenty-six (26) fires combined was \$3,122,972.

This increase of loss is no doubt due to inflated values and the readjustment period we have been passing through. Another cause for this increased number of fires and losses may be on account of the rapid increase of fire producing agencies, such as gasoline and electricity, both of which should be better controlled by state regulations.

There has been a general increase of loss in other states as well as in Iowa, and Iowa has not suffered in proportion to what many other states have suffered. The Committee on Publicity and Education claims there is on an average of five (5) schoolhouse fires each day of the school year, and five (5) church fires each day of the year in the United States. Iowa is more fortunate in this re-

spect than other states. In 1922, there were thirty-eight (38) schoolhouse fires totalling a loss of \$115,257, and thirty-four (34) church fires totalling a loss of \$164,703.

A glance at the record of fires from sparks and defective flues should interest the people in the non-combustible roofs and better chimneys.

**Deaths By Fire:** In 1922 there were 92 deaths reported as the direct result of fire, of which number 32 were women and 40 were children.

In 40 cases fatal to life, gasoline or coal oil was involved. In 11 cases persons were burned to death as the result of bonfire carelessness.

Fourteen (14) persons lost their lives in burning buildings, the origin of the fires being unknown.

The Committee on Publicity and Education claim there are about 15,000 people killed and 50,000 injured each year in the United States as a direct result of fire and Iowa contributes on an average of more than 100 each year.

Tables Numbered I, II and III in the back of this report will give you detailed information showing the number of fires, loss by counties, kinds of structures, and causes of the various fires reported.

Tables Numbered IV and V will give you the names of the cities and towns in which inspections were made as well as the counties in which suspicious fires were investigated.

### A COMPARISON OF THE LOSSES IN NINETEEN LARGEST CITIES IN IOWA IN 1921 AND 1922

| Cities         | —1921—    |             | —1922—    |             |
|----------------|-----------|-------------|-----------|-------------|
|                | No. Fires | Loss        | No. Fires | Loss        |
| Boone          | 33        | \$ 40,103   | 42        | \$ 7,069    |
| Burlington     | 27        | 66,281      | 31        | 50,756      |
| Cedar Rapids   | 89        | 111,699     | 125       | 166,617     |
| Clinton        | 96        | 49,741      | 135       | 119,094     |
| Council Bluffs | 190       | 159,905     | 254       | 398,098     |
| Davenport      | 259       | 327,304     | 300       | 357,915     |
| Des Moines     | 282       | 890,648     | 708       | 641,199     |
| Dubuque        | 71        | 62,731      | 112       | 44,442      |
| Fort Madison   | 36        | 148,953     | 36        | 58,052      |
| Fort Dodge     | 56        | 106,589     | 79        | 397,720     |
| Iowa City      | 33        | 114,875     | 73        | 141,569     |
| Keokuk         | 64        | 22,351      | 93        | 108,526     |
| Marshalltown   | 76        | 46,711      | 100       | 84,838      |
| Mason City     | 54        | 52,408      | 52        | 75,246      |
| Muscatine      | 60        | 33,113      | 58        | 22,474      |
| Oskaloosa      | 22        | 36,778      | 25        | 114,908     |
| Ottumwa        | 30        | 144,099     | 151       | 90,259      |
| Siox City      | 407       | 861,616     | 437       | 188,524     |
| Waterloo       | 144       | 126,979     | 164       | 249,707     |
| Totals         | 2,194     | \$3,218,939 | 3,000     | \$3,402,243 |

The following tables will give you the loss by months, the kind of structures in which the greatest number of fires occurred and the causes of the greatest number of fires.



## A COMPARISON OF FIRE LOSSES BY MONTHS FOR 1921 AND 1922

|           | —1921—    |             | —1922—    |              |
|-----------|-----------|-------------|-----------|--------------|
|           | No. Fires | Loss        | No. Fires | Loss         |
| January   | 528       | \$ 821,757  | 924       | \$ 1,216,465 |
| February  | 488       | 978,967     | 877       | 1,622,944    |
| March     | 579       | 667,377     | 479       | 1,184,297    |
| April     | 362       | 819,057     | 410       | 767,237      |
| May       | 330       | 591,572     | 277       | 588,129      |
| June      | 210       | 611,080     | 286       | 782,812      |
| July      | 316       | 813,867     | 340       | 488,605      |
| August    | 267       | 499,053     | 223       | 363,293      |
| September | 266       | 385,906     | 301       | 704,565      |
| October   | 382       | 691,333     | 428       | 652,612      |
| November  | 439       | 671,771     | 321       | 392,957      |
| December  | 602       | 2,056,405   | 687       | 1,488,256    |
| Totals    | 4,769     | \$9,608,145 | 5,553     | \$10,151,011 |

## KINDS OF STRUCTURES IN WHICH THE GREATEST NUMBER OF FIRES OCCURRED.

|   | No. Fires | Loss        |
|---|-----------|-------------|
| Dwellings                                       | 3,014     | \$2,419,122 |
| Barns   | 514       | 1,205,597   |
| Stores  | 354       | 2,177,324   |
| Automobiles (does not include those in garages) | 180       | 28,606      |
| Garages   | 166       | 366,529     |
| Houses, Apartments, Boarding, etc.              | 133       | 80,959      |
| Shops   | 125       | 143,297     |
| Sheds   | 118       | 45,999      |
| Restaurants and cafes                           | 76        | 117,763     |
| Offices and office buildings                    | 67        | 286,022     |
| Warehouses                                      | 66        | 226,196     |
| Factories                                       | 54        | 880,552     |
| Hotels  | 40        | 107,014     |
| Schoolhouses                                    | 38        | 115,257     |
| Churches  | 34        | 164,703     |
| Totals  | 4,979     | \$8,363,990 |

## CAUSES OF THE GREATEST NUMBER OF FIRES.

|                                     | No. Fires | Loss        |
|-------------------------------------|-----------|-------------|
| Sparks from flues                   | 1,610     | \$ 597,294  |
| Unknown                             | 1,228     | 5,958,050   |
| Adjoining                           | 447       | 1,316,716   |
| Defective flues                     | 294       | 581,857     |
| Defective electric wiring           | 198       | 211,035     |
| Spontaneous combustion              | 162       | 301,875     |
| Overheated furnaces and stoves      | 120       | 215,222     |
| Incendiary and probably incendiary  | 120       | 685,388     |
| Defective stovepipes                | 120       | 96,478      |
| Lightning                           | 117       | 294,233     |
| Smokers' carelessness               | 107       | 48,124      |
| Gasoline and oil stove carelessness | 83        | 68,467      |
| Children and matches                | 78        | 25,859      |
| Totals                              | 4,634     | \$9,504,382 |

## INVESTIGATIONS

During the year 1922, 224 cases were investigated by this department. There were 36 cases involving 53 persons submitted to the county attorneys which resulted in 18 indictments, 10 confessions, one deported (insane), 6 ignored by the Grand Jury, 7 pending before the Grand Jury and 11 ignored by the county attorneys.

In two cases the persons were given 30 years imprisonment each, two were given ten years imprisonment each, one sent to the reform school and 10 paroled on account of their age. Other cases pending.

In addition to the 36 cases sent to the county attorneys there were 50 cases in which the admitted over-insurance totalled a loss of \$135,633. There were also 28 cases where there was some evidence tending to show the fire was set by design but no motive on the part of the assured.

In the rest of the cases investigated there were many suspicious circumstances, but not enough tangible evidence to fully determine the real origin of the fire.

Early in 1923, two persons were convicted in Council Bluffs, one being sentenced to life imprisonment for setting fire in an inhabited building in the nighttime and the other was given five years in the penitentiary for burning to injure the insurance company.

In many cases where investigations were made and no prosecution followed, no claim was made by the assured for loss incurred.

In cases where investigations have been made, we have exercised the greatest care that no innocent person should suffer, but when evidence has been secured tending to show that a crime had been committed, we submitted the evidence to the county attorney for his action.

In this connection, I want to urge that the people in general help aid and assist the law enforcing officers to bring to justice the persons who set fires for revenge or to collect heavy insurance. It is not only the loss of property that the people must pay, but there is a great danger to life and property of the innocent who must suffer at the hands of the guilty. I urge that you back up your county attorney in all arson cases that come to your attention.

The names of persons arrested will be found under the head of Arrests and Prosecutions.

## INSPECTIONS

In 1922, 1,225 inspections were made in 176 different cities and towns, resulting in the removal of hundreds of fire hazards.

Our records show that more than 95 per cent of the orders issued have been complied with and I am thoroughly convinced that thorough inspections would prevent hundreds of fires that would otherwise occur if inspections were not made.

Every city of any size could well afford to hire a competent inspector for a certain period to examine every chimney and heating plant and order any defects remedied.

The city should also pass and enforce local ordinances prohibiting the burning of trash near buildings, the piling of ashes against buildings or the storing of ashes in wooden receptacles, also regulations for the handling and storing of gasoline as well as making a code for standard electric wiring.

For more detailed information, see Table IV in the back of this report.

#### EDUCATIONAL WORK

Under the law the state fire marshal has prepared bulletins on the causes and dangers of fire for use in the schools, and has endeavored to reach every schoolhouse in the state, as the law requires teachers to teach Fire Prevention in connection with other branches.

Fire drills are also required each month in all buildings of more than one story.

During the past four years the state fire marshal has had 125,000 large size Fire Prevention posters printed containing the proclamation of the Governor, and through the co-operation of the county superintendents of schools has endeavored to place at least one poster in each schoolhouse in the state.

Outside of the schools we have sent posters to newspapers, banks, post offices, hotels, commercial clubs, fire chiefs, mayors, depots, etc.

In addition to these Fire Prevention posters we are sending out about 75,000 pieces of Fire Prevention literature each year which has been furnished by fire prevention agencies.

Lectures have also been given to fire departments, farm bureaus, farm institutes, commercial clubs, insurance gatherings, and schools. City councils have been urged to purchase better fire equipment and adopt better building ordinances.

The office has secured two sets of motion picture film entitled "The Danger That Never Sleeps" which is a forceful reminder of carelessness. These films have been routed over the state to the fire chiefs, school superintendents, and picture theaters, free of charge, to be shown as an educational feature with the idea of educating

the rising generation in the causes and dangers of fire. I would urge county superintendents to make arrangements to show this film.

The use of the lightning rod is almost an absolute protection against loss by lightning. I have gone into this matter very thoroughly and the records will show that in 1920 there were 157 lightning losses. In 143 cases there were no rods and the loss was \$362,390; lightning running in on wires, 5 with a loss of \$1,119; 9 losses with rods, causing a loss of \$26,209.

In 1921 there were 158 lightning losses, 142 without rods, causing a loss of \$284,203; lightning running in on wires 6, loss \$3,963; 10 with rods, loss \$32,775.

In 1922 there were 117 lightning losses, 105 without rods, causing a loss of \$292,248; lightning running in on wires 8, loss \$703; 4 with rods, loss \$11,432, and there is evidence tending to show that where the rodded buildings were struck, the rods were either defective or not properly installed.

#### STATISTICAL WORK

Until the establishment of the state fire marshal's office and the provisions for the collection and publication by this department of certain data pertaining to fire losses, there had been no office or other agency in the state concerned in securing this information, except the companies and associations doing a fire insurance business.

The fire data reported by them to the various departments does not give full information outside of the amount collected from the insurance companies. No account could therefore be taken by them of the losses which were either partially or wholly without insurance, and when we consider that about twenty-five per cent of the total annual fire loss in this state is not covered by insurance, we must at once conclude that the only approximately complete and accurate statistical information relative to these matters is obtained by the state fire marshal.

It is true that in many cases the values are based on the combined judgment of the owner and the fire chief or the township clerk who inspects the fire and makes the report.

In addition to the loss and damage, our reports cover the material destroyed, the damage to the building and the contents set out separately, also the cause of each fire so far as known.

For more detailed information see Tables Numbered I, II and III.

#### FIRE PREVENTION

The method of real Fire Prevention is in its infancy.





Arson plant found in the W. A. and D. C. Koon store at Mason City, July 16, 1922.



Another view of arson plant at Mason City. When the plant was found the box was over the candle, and for want of air the candle had gone out.

The foundation of Fire Prevention is better buildings, thorough inspection, followed by good housekeeping which will eliminate gross carelessness.

If we would follow the practice of the foreign countries and make every person responsible for any loss, damage or injury caused by his own act of carelessness or negligence, we would soon see the fire loss of the country rapidly diminish.

Why not make the same law apply to the owner of fire hazards that you do to cities or corporations? If this be done, you will solve the problem of Fire Prevention.

## ARRESTS AND PROSECUTIONS

### SIoux CITY, WOODBURY COUNTY

On January 29, 1922, about 1:45 a. m. a fire broke out in the barber shop of Geo. Callas. Gus Benos, alias Gus Brown, was indicted and released on \$2,000 bonds. Case pending.

### DUBUQUE, DUBUQUE COUNTY

On January 30, 1922, about 3:51 a. m. a fire occurred in a dwelling occupied by George Washington. Washington confessed to setting fire to collect the insurance and was given 10 years in the penitentiary.

### CEDAR RAPIDS, LINN COUNTY

On June 12, 1922, Clarence Wiese set fire to the J. G. Cherry Co. ware house, doing considerable damage. Wiese was indicted and is now in jail pending trial.

This is the third offense that Wiese has been in custody for and his actions seem to be that of a pyromaniac.

### WILLIAMSBURG (NEAR), IOWA COUNTY

On June 16, 1922, about 10:00 p. m. a fire destroyed an auto owned by Geo. Selmer. Selmer was indicted for perjury in making a proof of loss for more than the car was worth. Since the indictment the case has been dismissed by the county attorney.

### HAWKEYE, FAYETTE COUNTY

On June 18, 1922, and July 16, 1922, fires occurred in the property owned by L. A. Parker. Incendiary plants were found in both houses which resulted in the indictment of L. A. Parker on two counts. The case is being tried this week.

### ELKHORN, SHELBY COUNTY

On July 6, 1922, at 1:00 a. m. a picture show owned by Elmer B. Peterson was set on fire. J. Harry Savage was indicted and tried for arson in connection with these fires. The jury returned a verdict of not guilty. The motive was on account of competition.

### WASHINGTON TOWNSHIP, CRAWFORD COUNTY

On July 16, 1922, about 9:00 p. m. a fire destroyed a machine shed owned by P. F. Clinton. Oliver Pearson, 16 years of age, confessed to the sheriff that he set the fire. Later he claimed it was an accident. After repudiating his confession he was arrested for breaking and entering. Case pending.

### MASON CITY, CERRO GORDO COUNTY

On July 16, 1922, about midnight, an arson plant was found by the night watchman in a grocery store owned by W. A. and D. C. Koon. The

plant consisted of long strings of excelsior, oil soaked and a candle on a pad of excelsior which was oil soaked and a paper box or carton set over the candle. The candle shows it had been lighted but went out, which no doubt was caused by the lack of air. Both W. A. and D. C. Koon were indicted for setting fire with intent to burn. The case has not as yet been tried.

A reproduction of photographs of the arson plant will be found in this report.

### SIoux CITY, WOODBURY COUNTY

On July 23, 1922, about 4:00 a. m. the Model Lunch Room owned by J. N. Callas and Harry Harry was set on fire. Harry Harry has been indicted for setting this fire. Case pending.

### APLINGTON, BUTLER COUNTY

On July 28, 1922, at 12:50 a. m. a pool hall owned by Janssen Bros. was burned. John C. Janssen and Chris Janssen were indicted, tried November 20, 1922, and the judge directed a verdict for the defendants.

### SIoux CITY, WOODBURY COUNTY

On September 9, 1922, about 12:48 a. m. a dwelling occupied by G. G. McKay and H. D. Dimos burned. G. G. McKay, P. M. Arhontis and Von M. Greene were indicted on two counts of burning to injure the insurance company. McKay and Arhontis were tried and convicted and sentenced to the penitentiary for 30 years each. Greene is out on bonds and case pending.

### GRAETTINGER (NEAR), EMMET COUNTY

On September 22, 1922, a fire destroyed a hay stack. John Harris, 13 years old, confessed to setting the fire. He was sent to the Industrial School for Boys at Eldora.

### CALLENDER (NEAR), WEBSTER COUNTY

On October 7, 1922, about 8:30 p. m. a dwelling owned by Thos. McCall was discovered to be on fire. Rancie Myrzena was arrested and confessed to setting the fire. The charge was changed to breaking and entering, to which Myrzena pleaded guilty and was sent to the penitentiary for ten years.

### COUNCIL BLUFFS, POTTAWATTAMIE COUNTY

On October 26, 1922, about 8:20 p. m. a fire destroyed a shed owned by L. J. Jensen. Eugene Elgin, a boy of 13 years of age, confessed to setting the fire and was paroled during good behavior.

During the year, 9 boys confessed to setting fires, who were paroled during good behavior. In one case the parents of the boy paid for the property destroyed.

## RECOMMENDATIONS

I wish to renew my recommendations as follows:

1. A larger department with enough appropriation to make a thorough inspection throughout the state.
2. A state law requiring a certain standard for dry cleaners which can be made self-supporting by a license and inspection fee which the cleaners themselves would be glad to pay. This bill should provide for an inspector to be appointed in each congressional district by the state fire marshal and his per diem and expenses should be

paid out of the license and inspection fee charged. In no case should the expense of inspection be more than the receipts.

3. Electric Wiring. It is claimed by the Committee on Publicity and Education that electric wiring is the one greatest hazard in the United States, the loss being \$85,000,000 in five years charged to electric wiring. I urge that this Legislature pass a law requiring the standard code for electric wiring in harmony with the National Code for electric wiring.

Electricity is not only being used in the cities but on the farm and without some regulations providing for standard wiring and inspection, it makes one shudder to think what might happen.

This bill can be so drawn that it will be self-supporting by charging a fee to the electric contractors which they will gladly pay and provide for an inspector in each congressional district to be appointed under the supervision of the state fire marshal. The per diem and expenses to be paid out of the receipts and in no case shall the expenses exceed the license fee received.

### CONCLUSIONS

To my entire office force whose loyal and faithful services to me and the state have been rendered in a most competent and generous manner, I desire to make this public acknowledgment of my appreciation.

The state fire marshal's office is no longer an experiment, its usefulness and influence for good will be more manifest in the future than it has been in the past.

There are 32 states in the Union now that have a fire marshal law. New York, Missouri, Utah and California now have bills before the Legislatures with the view of establishing a fire marshal's office.

We earnestly ask that you investigate the department in way of efficiency as we know it will give you a better insight as to the needs of the department.

The Fire Marshal's Association extends all over North America and is recognized as a leading factor in convicting persons who set fire for gain, as well as a leader in Fire Prevention activities and should have the support of all law-abiding citizens.

TABLE NO. I.

Showing the Total Number of Fires Reported by Counties and Cities of More Than 10,000, Damage to Buildings and Contents Combined and Insured. Also Showing Number of These Fires and Loss which was Uninsured.

| Counties and Cities of 10,000 and over | No. of fires | Damage to Buildings and contents | No. of fires without insurance | Loss     |
|--|--------------|----------------------------------|--------------------------------|----------|
| Adair                                  | 19           | \$ 32,465                        | 3                              | \$ 8,000 |
| Adams                                  | 7            | 13,010                           | 0                              | 0        |
| Altamont                               | 19           | 28,015                           | 3                              | 462      |
| Apanoson                               | 62           | 135,962                          | 10                             | 2,705    |
| Audubon                                | 14           | 60,028                           | 3                              | 11,150   |
| Benton                                 | 39           | 121,914                          | 3                              | 2,553    |
| Black Hawk Waterloo                    | 164          | 349,707                          | 19                             | 7,331    |
| Bal. Black Hawk Co.                    | 5            | 67,008                           | 1                              | 1,350    |
| Boone-Boone                            | 42           | 7,009                            | 3                              | 240      |
| Bal. Boone Co.                         | 29           | 67,192                           | 2                              | 4,190    |
| Brown                                  | 17           | 36,305                           | 2                              | 2,350    |
| Buchanan                               | 20           | 29,110                           | 1                              | 1,150    |
| Burns Vesta                            | 24           | 31,838                           | 0                              | 0        |
| Buier                                  | 25           | 52,163                           | 4                              | 2,390    |
| Calhoun                                | 37           | 161,725                          | 4                              | 4,370    |
| Carroll                                | 36           | 54,145                           | 2                              | 1,609    |
| Cass                                   | 41           | 139,760                          | 6                              | 2,150    |
| Cedar                                  | 32           | 57,709                           | 0                              | 0        |
| Cerro-Gordo-Mason City                 | 32           | 75,240                           | 8                              | 1,321    |
| Bal. Cerro Gordo Co.                   | 29           | 80,240                           | 0                              | 0        |
| Clarendon                              | 17           | 42,961                           | 1                              | 30       |
| Chickasaw                              | 23           | 37,906                           | 0                              | 0        |
| Clarke                                 | 15           | 24,911                           | 1                              | 1,040    |
| Clay                                   | 41           | 57,235                           | 6                              | 6,750    |
| Clayton                                | 22           | 41,273                           | 4                              | 1,220    |
| Clinton-Clinton                        | 163          | 119,094                          | 17                             | 1,220    |
| Bal. Clinton Co.                       | 16           | 82,131                           | 2                              | 213      |
| Crawford                               | 24           | 75,445                           | 2                              | 1,610    |
| Dallas                                 | 31           | 110,573                          | 7                              | 4,280    |
| Davis                                  | 28           | 7,200                            | 0                              | 0        |
| DeWitt                                 | 28           | 27,277                           | 2                              | 850      |
| Delaware                               | 13           | 22,650                           | 1                              | 190      |
| Des Moines-Burlington                  | 31           | 30,716                           | 0                              | 0        |
| Bal. Des Moines Co.                    | 16           | 55,455                           | 0                              | 0        |
| Dickinson                              | 19           | 20,217                           | 2                              | 2,300    |
| Dubuque-Dubuque                        | 112          | 44,442                           | 10                             | 143      |
| Bal. Dubuque Co.                       | 21           | 29,540                           | 2                              | 1,265    |
| Emmet                                  | 22           | 110,280                          | 2                              | 1,200    |
| Fayette                                | 32           | 140,082                          | 4                              | 1,082    |
| Floyd                                  | 37           | 86,465                           | 6                              | 4,400    |
| Franklin                               | 43           | 107,210                          | 10                             | 2,550    |
| Fremont                                | 29           | 167,302                          | 2                              | 7,000    |
| Greene                                 | 30           | 117,424                          | 2                              | 2,090    |
| Grundy                                 | 24           | 51,842                           | 2                              | 30       |
| Osborne                                | 24           | 69,422                           | 4                              | 473      |
| Hamilton                               | 22           | 40,000                           | 4                              | 1,260    |
| Hancock                                | 24           | 117,290                          | 2                              | 420      |
| Hardin                                 | 29           | 50,543                           | 2                              | 2,130    |
| Harrison                               | 34           | 77,048                           | 3                              | 1,243    |
| Henry                                  | 39           | 44,319                           | 3                              | 3,050    |
| Hempstead                              | 14           | 14,500                           | 0                              | 0        |
| Humboldt                               | 12           | 42,342                           | 1                              | 250      |
| Ia.                                    | 13           | 21,090                           | 2                              | 1,025    |
| Iowa                                   | 24           | 49,137                           | 3                              | 2,290    |
| Jackson                                | 28           | 38,420                           | 2                              | 1,190    |
| Jasper                                 | 32           | 49,400                           | 7                              | 1,718    |
| Jefferson                              | 33           | 75,747                           | 2                              | 213      |
| Johnson-Iowa City                      | 73           | 141,209                          | 14                             | 3,455    |
| Bal. Johnson Co.                       | 22           | 52,629                           | 1                              | 130      |
| Jones                                  | 27           | 39,718                           | 2                              | 850      |
| Kossuth                                | 34           | 86,864                           | 3                              | 3,250    |
| Kossuth                                | 24           | 40,330                           | 2                              | 316      |
| Keosauqua                              | 36           | 74,033                           | 1                              | 972      |
| Lee-Fl. Madison                        | 32           | 106,828                          | 1                              | 1,160    |
| Keokuk                                 | 11           | 291,369                          | 2                              | 300,288  |
| Bal. Lee Co.                           |              |                                  |                                |          |



TABLE NO. I.—CONTINUED.

| Counties and Cities of 10,000 and over | No. of fires | Damage to buildings and contents | No. of fires without insurance | Loss    |
|--|--------------|----------------------------------|--------------------------------|---------|
| Linn-Cedar Rapids                      | 128          | 166,617                          | 16                             | 2,343   |
| Ial. Linn Co.                          | 37           | 152,225                          | 7                              | 8,119   |
| Louis                                  | 9            | 27,723                           | 0                              | 1,496   |
| Lynn                                   | 23           | 72,181                           | 2                              | 9,299   |
| Madison                                | 12           | 24,273                           | 2                              | 5,230   |
| Malaska-Oskaloosa                      | 26           | 42,611                           | 3                              | 5,330   |
| Ial. Malaska Co.                       | 25           | 114,005                          | 0                              | 19      |
| Marion                                 | 54           | 207,269                          | 12                             | 1,346   |
| Marshall-Marshaltown                   | 100          | 34,638                           | 19                             | 7,873   |
| Ial. Marshall Co.                      | 30           | 55,532                           | 4                              | 1,128   |
| Mills                                  | 19           | 28,845                           | 0                              | 2,308   |
| Missill                                | 10           | 11,920                           | 2                              | 409     |
| Monroe                                 | 17           | 36,927                           | 0                              | 6,658   |
| Montgomery                             | 20           | 38,291                           | 3                              | 7,094   |
| Muscatine-Muscatine                    | 58           | 22,474                           | 8                              | 2,111   |
| Ial. Muscatine Co.                     | 22           | 59,169                           | 1                              | 8,000   |
| O'Brien                                | 27           | 108,590                          | 3                              | 1,802   |
| Oswaka                                 | 16           | 23,620                           | 2                              | 322     |
| Paga                                   | 32           | 79,039                           | 8                              | 1,873   |
| Palo Alto                              | 14           | 21,315                           | 0                              | 3,471   |
| Plymouth                               | 35           | 38,115                           | 8                              | 1,259   |
| Pocahontas                             | 12           | 22,298                           | 1                              | 4,800   |
| Polk-Des Moines                        | 708          | 641,199                          | 63                             | 5,000   |
| Ial. Polk Co.                          | 42           | 92,988                           | 3                              | 259     |
| Pottawattamie-Council Bluffs           | 284          | 398,096                          | 43                             | 1,873   |
| Ial. Pottawattamie Co.                 | 32           | 61,980                           | 3                              | 3,471   |
| Poweshook                              | 45           | 98,952                           | 5                              | 3,471   |
| Ringgold                               | 18           | 39,489                           | 0                              | 1,802   |
| Sae                                    | 29           | 32,510                           | 3                              | 1,802   |
| Scott-Davenport                        | 300          | 397,915                          | 22                             | 1,259   |
| Ial. Scott Co.                         | 9            | 30,124                           | 1                              | 120     |
| Shelby                                 | 22           | 38,482                           | 3                              | 2,665   |
| Sioux                                  | 26           | 61,930                           | 0                              | 1,170   |
| Story                                  | 67           | 446,423                          | 10                             | 117,115 |
| Tama                                   | 17           | 18,463                           | 1                              | 1,170   |
| Taylor                                 | 15           | 6,501                            | 1                              | 903     |
| Union                                  | 28           | 34,296                           | 2                              | 160     |
| Van Buren                              | 16           | 23,068                           | 1                              | 1,802   |
| Wapello-Ottumwa                        | 153          | 60,259                           | 3                              | 1,802   |
| Ial. Wapello Co.                       | 14           | 38,328                           | 0                              | 8       |
| Warren                                 | 9            | 5,569                            | 0                              | 2,665   |
| Washington                             | 29           | 51,145                           | 10                             | 5,416   |
| Weaver                                 | 32           | 84,790                           | 4                              | 12,130  |
| Webster-Fort Dodge                     | 79           | 397,720                          | 6                              | 3,825   |
| Ial. Webster Co.                       | 22           | 68,057                           | 3                              | 2,665   |
| Winnebago                              | 21           | 37,694                           | 2                              | 1,802   |
| Winneshek                              | 23           | 30,467                           | 3                              | 2,665   |
| Woodbury-Sumax City                    | 417          | 185,254                          | 38                             | 1,802   |
| Ial. Woodbury Co.                      | 36           | 78,767                           | 1                              | 903     |
| Worth                                  | 9            | 3,923                            | 1                              | 1,802   |
| Wright                                 | 33           | 59,774                           | 2                              | 1,802   |
| Totals                                 | 8,553        | 10,181,011                       | 603                            | 773,000 |

TABLE NO. II.

Showing the Nature and Character of the Buildings or Properties Destroyed or Damaged, the Value of Each, the Damage Thereto, the Value of the Contents of Each and the Damage Thereto, the Kind of Material of Which Each Was Constructed, and Whether the Loss Was Total or Partial, for the Year 1922.

| No. of Years | Buildings |         | Contents |         | Character of Buildings Affected |         |                   |                  |
|--------------|-----------|---------|----------|---------|---------------------------------|---------|-------------------|------------------|
|              | Value     | Damage  | Value    | Damage  | Wood                            | Brick   | Concrete or Stone | Loss on Contents |
|              |           |         |          |         | Total                           | Partial | Total             | Partial          |
| 1            | 0         | 0       | 8,856    | 2,458   | 0                               | 0       | 0                 | 0                |
| 1            | 1,001     | 0       | 160,000  | 160,000 | 0                               | 0       | 0                 | 0                |
| 1            | 145,000   | 127,000 | 35,305   | 35,305  | 0                               | 0       | 0                 | 0                |
| 1            | 124,025   | 27,310  | 85,305   | 85,305  | 0                               | 124     | 0                 | 12               |
| 1            | 15,000    | 15,550  | 82,000   | 78,000  | 0                               | 0       | 0                 | 0                |
| 1            | 172,000   | 8,232   | 142,700  | 17,600  | 0                               | 0       | 0                 | 0                |
| 1            | 2,000     | 2,000   | 17,600   | 17,600  | 0                               | 0       | 0                 | 0                |
| 1            | 236,400   | 11,945  | 137,300  | 9,459   | 0                               | 0       | 0                 | 0                |
| 1            | 137,675   | 796,004 | 337,762  | 336,724 | 0                               | 0       | 0                 | 0                |
| 1            | 42,000    | 1,250   | 8,000    | 47,922  | 0                               | 0       | 0                 | 0                |
| 1            | 36,800    | 2,447   | 35,200   | 1,563   | 0                               | 0       | 0                 | 0                |
| 1            | 42,000    | 1,250   | 8,000    | 47,922  | 0                               | 0       | 0                 | 0                |
| 1            | 2,402,825 | 4,242   | 32,400   | 1,255   | 0                               | 0       | 0                 | 0                |
| 1            | 3,355     | 5,961   | 75,000   | 1,900   | 0                               | 0       | 0                 | 0                |
| 1            | 18,100    | 2,665   | 7,279    | 2,022   | 0                               | 0       | 0                 | 0                |
| 1            | 18,100    | 1,670   | 100      | 100     | 0                               | 0       | 0                 | 0                |
| 1            | 33,000    | 3,323   | 480      | 480     | 0                               | 0       | 0                 | 0                |
| 1            | 11,000    | 550     | 0        | 0       | 0                               | 0       | 0                 | 0                |
| 1            | 7,000     | 737     | 2,260    | 1,972   | 0                               | 0       | 0                 | 0                |
| 1            | 8,000     | 460     | 300      | 300     | 0                               | 0       | 0                 | 0                |
| 1            | 8,000     | 125     | 2,457    | 3,428   | 0                               | 0       | 0                 | 0                |
| 1            | 61,000    | 3,148   | 15,000   | 26,819  | 0                               | 0       | 0                 | 0                |
| 1            | 213,000   | 3,160   | 98,705   | 18,617  | 0                               | 0       | 0                 | 0                |
| 1            | 14,000    | 1,802   | 4,550    | 4,550   | 0                               | 0       | 0                 | 0                |
| 1            | 183,000   | 75,450  | 5,000    | 5,000   | 0                               | 0       | 0                 | 0                |

- Milling machine and room
- Amplifier
- Armory
- Automobile
- Automobile Sales Room
- Art's Storage
- Automobile Supplies
- Banks
- Barns (Barn)
- Barber shop
- Bath parlors
- Bath
- Book store and business
- Bridge
- Business
- Car
- Car
- Freight and express
- Restaurant and mail
- Street car
- Carroll's shoe works
- Chickens
- Chicken brooder
- City and township hall
- Clothing and drying establishment
- Confectionery
- Corner
- Corner house and jail

TABLE NO. II.—CONTINUED.

| Character of Buildings Affected     | Buildings    |           |         | Contents  |         |                  | Character of Buildings Affected |         |                  |
|-------------------------------------|--------------|-----------|---------|-----------|---------|------------------|---------------------------------|---------|------------------|
|                                     | No. of Fires | Value     | Damage  | Value     | Damage  | Loss on Contents | Low on Buildings                |         | Loss on Contents |
|                                     |              |           |         |           |         |                  | Total                           | Partial |                  |
| Concrete and masonry buildings..... | 10           | 33,190    | 19,770  | 10,970    | 10,873  | 0                | 0                               | 0       | 0                |
| Barns, hails.....                   | 3            | 46,000    | 16,190  | 1,000     | 1,300   | 0                | 0                               | 0       | 0                |
| Dwellings (lives).....              | 274          | 872,610   | 708,773 | 377,700   | 383,100 | 0                | 0                               | 0       | 0                |
| Dwellings (lives).....              | 2,428        | 9,992,295 | 972,058 | 1,801,498 | 294,343 | 2,411            | 117                             | 149     | 1,004            |
| Elevators.....                      | 18           | 223,115   | 189,264 | 91,294    | 87,344  | 0                | 0                               | 0       | 0                |
| Factory.....                        | 4            | 92,800    | 47,000  | 86,000    | 46,000  | 0                | 0                               | 0       | 0                |
| Garage.....                         | 1            | 10,000    | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Candy and ice.....                  | 142          | 140,000   | 1,321   | 292,000   | 790     | 0                | 0                               | 0       | 0                |
| Churning and can.....               | 10,800       | 5,050     | 22,000  | 12,217    | 12,217  | 0                | 0                               | 0       | 0                |
| Cabinet block.....                  | 900          | 20        | 790     | 152       | 152     | 0                | 0                               | 0       | 0                |
| Cement, mortar, machine.....        | 150,000      | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Cider mill.....                     | 28,800       | 12,300    | 28,000  | 15,500    | 15,500  | 0                | 0                               | 0       | 0                |
| Dress and suit.....                 | 41,440       | 79,851    | 239,139 | 191,442   | 0       | 0                | 0                               | 0       | 0                |
| Hot Stoves.....                     | 22,000       | 2,651     | 63,000  | 54,342    | 0       | 0                | 0                               | 0       | 0                |
| Lumber.....                         | 144,800      | 12,951    | 118,500 | 72,142    | 0       | 0                | 0                               | 0       | 0                |
| Lumber, saw.....                    | 82,845       | 7,284     | 24,000  | 15,370    | 0       | 0                | 0                               | 0       | 0                |
| Mattress.....                       | 80,000       | 1,000     | 11,000  | 0         | 0       | 0                | 0                               | 0       | 0                |
| Optical.....                        | 20,000       | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Paper and printing.....             | 40,000       | 1,300     | 40,000  | 13,485    | 0       | 0                | 0                               | 0       | 0                |
| Pianos and organs.....              | 0            | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Spools and handles.....             | 110,240      | 1,800     | 37,000  | 30,000    | 0       | 0                | 0                               | 0       | 0                |
| Shoes and socks.....                | 128,000      | 2,840     | 5,000   | 0         | 0       | 0                | 0                               | 0       | 0                |
| Ties and sewing.....                | 2,401,000    | 750       | 265,000 | 2,416     | 0       | 0                | 0                               | 0       | 0                |
| Valuing machines.....               | 1,500        | 1,500     | 8,000   | 8,000     | 0       | 0                | 0                               | 0       | 0                |
| Wagon.....                          | 85,750       | 1,337     | 131,000 | 374       | 0       | 0                | 0                               | 0       | 0                |
| Figs, grapes.....                   | 0            | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Feed and stock feed.....            | 0            | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |
| Foundries.....                      | 0            | 0         | 0       | 0         | 0       | 0                | 0                               | 0       | 0                |

|                                  |           |           |         |           |         |     |    |   |    |   |
|----------------------------------|-----------|-----------|---------|-----------|---------|-----|----|---|----|---|
| Gasworks—Private.....            | 118       | 60,220    | 33,178  | 114,742   | 10,226  | 107 | 0  | 0 | 0  | 0 |
| Gas, Public.....                 | 45        | 927,000   | 1,120   | 6,000     | 18,226  | 0   | 0  | 0 | 0  | 0 |
| Gas, Private.....                | 68        | 207,750   | 20,750  | 18,110    | 17,400  | 15  | 0  | 0 | 0  | 0 |
| Green houses.....                | 37        | 12,000    | 1,900   | 17,000    | 2,003   | 2   | 0  | 0 | 0  | 0 |
| Hay, grain and straw.....        | 25        | 60,200    | 6,432   | 25,045    | 16,734  | 5   | 0  | 0 | 0  | 0 |
| Hauls.....                       | 2,936,000 | 80,120    | 294,924 | 7,294     | 0       | 0   | 0  | 0 | 0  | 0 |
| Hemp.....                        | 427,000   | 34,200    | 34,200  | 0         | 0       | 0   | 0  | 0 | 0  | 0 |
| Hemp, machinery and dies.....    | 74        | 427,000   | 34,200  | 80,023    | 21,065  | 25  | 40 | 1 | 42 | 0 |
| Hemp, machinery and rearing..... | 44        | 305,500   | 20,233  | 82,700    | 8,940   | 36  | 12 | 0 | 0  | 0 |
| Hemp, machinery.....             | 11        | 197,000   | 6,427   | 3,220     | 4,075   | 11  | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 19        | 18,450    | 13,500  | 17,500    | 7,000   | 18  | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 2         | 25,000    | 2,500   | 2,500     | 2,500   | 2   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 27        | 4,200     | 4,200   | 2,150     | 2,150   | 27  | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 4         | 720       | 600     | 6,000     | 6,000   | 4   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 2         | 47,500    | 630     | 24,000    | 1,000   | 1   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 6         | 78,000    | 2,872   | 79,000    | 8,765   | 1   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 5         | 12,215    | 14,572  | 10,000    | 14,771  | 5   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 2         | 56,000    | 1,307   | 81,500    | 81,500  | 2   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 19        | 114,025   | 8,753   | 20,203    | 21,347  | 13  | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 15        | 96,000    | 41,770  | 65,110    | 21,347  | 15  | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 2         | 37,000    | 33,262  | 17,000    | 2,430   | 1   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 12        | 1,006,273 | 33,395  | 67,710    | 2,390   | 6   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 2         | 77,000    | 129     | 6,000     | 890     | 2   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 67        | 1,529,411 | 82,462  | 291,235   | 203,860 | 21  | 43 | 0 | 0  | 0 |
| Hemp, machinery.....             | 9         | 7,125     | 2,123   | 2,100     | 2,100   | 9   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 10        | 2,400,330 | 15,100  | 2,917,415 | 1,262   | 7   | 1  | 0 | 0  | 0 |
| Hemp, machinery.....             | 19        | 43,720    | 2,555   | 31,900    | 4,505   | 5   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 17        | 294,100   | 26,568  | 26,215    | 2,393   | 9   | 0  | 0 | 0  | 0 |
| Hemp, machinery.....             | 10        | 515,000   | 62,272  | 485,550   | 87,911  | 5   | 10 | 0 | 0  | 0 |
| Hemp, machinery.....             | 71        | 797,650   | 31,600  | 227,100   | 66,120  | 36  | 11 | 0 | 0  | 0 |
| Hemp, machinery.....             | 4         | 82,200    | 13,154  | 1,000     | 12,000  | 4   | 0  | 0 | 0  | 0 |

TABLE NO. II.—CONTINUED.

|   | No. of<br>Fires | Buildings  |           | Contents   |           | Character of Buildings Affected |       |                      | Loss on Contents  |         |       |         |
|---|-----------------|------------|-----------|------------|-----------|---------------------------------|-------|----------------------|-------------------|---------|-------|---------|
|   |                 | Value      | Damage    | Value      | Damage    | Wood                            | Brick | Concrete<br>or Stone | Loss on Buildings |         |       |         |
|   |                 |            |           |            |           |                                 |       |                      | Total             | Partial | Total | Partial |
| School houses.....                        | 28              | 1,467,850  | 101,452   | 191,835    | 12,955    | 10                              | 19    | 1                    | 15                | 21      | 13    | 10      |
| Sheds—Coal and wood.....                  | 14              | 33,129     | 17,748    | 22,000     | 15,485    | 14                              | 1     | 0                    | 39                | 12      | 18    | 22      |
| Sheds—Tool houses and sheds.....          | 9               | 13,725     | 6,748     | 1,200      | 15,933    | 14                              | 1     | 0                    | 3                 | 6       | 7     | 8       |
| Sheds—Sheet metal and shingles.....       | 1               | 0          | 650       | 2,000      | 13,425    | 0                               | 5     | 0                    | 0                 | 1       | 2     | 4       |
| Shops.....                                | 25              | 619,450    | 9,871     | 45,945     | 8,420     | 19                              | 6     | 1                    | 6                 | 17      | 6     | 19      |
| Stores.....                               | 18              | 10,850     | 8,655     | 10,450     | 10,200    | 11                              | 0     | 0                    | 8                 | 0       | 0     | 5       |
| Blacksmith.....                           | 4               | 9,900      | 2,405     | 4,900      | 8,000     | 0                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Carpenter.....                            | 4               | 9,900      | 2,405     | 4,900      | 8,000     | 0                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Hardware.....                             | 4               | 42,100     | 1,200     | 10,000     | 9,653     | 5                               | 2     | 0                    | 0                 | 3       | 0     | 4       |
| Handwriting.....                          | 3               | 210,000    | 752       | 7,000      | 4,000     | 2                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Iron.....                                 | 4               | 27,000     | 1,409     | 52,923     | 7,478     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Machines.....                             | 1               | 25,000     | 1,409     | 52,923     | 7,478     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Paint.....                                | 9               | 22,900     | 5,033     | 79,750     | 11,455    | 4                               | 4     | 0                    | 2                 | 8       | 1     | 5       |
| Printing and binding.....                 | 6               | 28,350     | 3,322     | 2,000      | 3,400     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Shoe repairing.....                       | 1               | 117,800    | 6,678     | 28,675     | 10,781    | 1                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Shoes.....                                | 11              | 33,900     | 7,675     | 21,850     | 6,692     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Vulcanizing.....                          | 3               | 2,000      | 2,000     | 400        | 300       | 0                               | 0     | 0                    | 0                 | 0       | 0     | 0       |
| Skating rinks.....                        | 7               | 19,850     | 2,220     | 6,000      | 3,900     | 0                               | 0     | 0                    | 0                 | 0       | 0     | 0       |
| Sold stock gardens.....                   | 7               | 109,000    | 16,655    | 28,100     | 13,384    | 0                               | 57    | 0                    | 0                 | 0       | 0     | 0       |
| Stoves, poultry and produce.....          | 2               | 7,500      | 8,720     | 27,000     | 4,200     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 0       |
| Stores—Army and navy goods.....           | 12              | 84,458     | 4,369     | 72,700     | 4,470     | 1                               | 0     | 0                    | 0                 | 0       | 0     | 0       |
| Stores—Clothing and shoes.....            | 24              | 1,050,100  | 131,802   | 197,762    | 165,513   | 0                               | 29    | 0                    | 139               | 34      | 1     | 37      |
| Stores—Furniture.....                     | 5               | 28,750     | 31,616    | 4,200      | 5,315     | 0                               | 0     | 0                    | 0                 | 0       | 0     | 4       |
| Stores—Fruit and produce, vegetables..... | 10              | 190,300    | 8,255     | 201,600    | 68,023    | 0                               | 0     | 0                    | 1                 | 0       | 1     | 7       |
| Stores—Furniture.....                     | 20              | 175,000    | 38,821    | 132,000    | 58,676    | 0                               | 3     | 0                    | 27                | 30      | 20    | 46      |
| Stores—Furniture.....                     | 71              | 656,900    | 49,652    | 294,500    | 89,541    | 0                               | 11    | 0                    | 23                | 10      | 12    | 33      |
| Stores—Grocery.....                       | 7               | 10,500     | 2,750     | 21,710     | 4,200     | 0                               | 17    | 0                    | 4                 | 21      | 24    | 24      |
| Stores—Retail hardware.....               | 10              | 43,000     | 10,350    | 70,000     | 20,078    | 0                               | 1     | 0                    | 4                 | 7       | 7     | 7       |
| Stores—Jewelry.....                       | 1               | 0          | 0         | 0          | 0         | 0                               | 0     | 0                    | 0                 | 0       | 0     | 0       |
| Stores—Lighting fixtures.....             | 2               | 15,000     | 344       | 28,000     | 3,717     | 0                               | 3     | 0                    | 0                 | 0       | 0     | 3       |
| Stores—Millinery.....                     | 27              | 96,700     | 26,528    | 75,500     | 31,490    | 14                              | 11    | 0                    | 0                 | 17      | 6     | 13      |
| Stores—Millinery.....                     | 13              | 151,000    | 26,489    | 127,272    | 62,218    | 9                               | 1     | 0                    | 0                 | 0       | 0     | 10      |
| Stores—Shoes.....                         | 11              | 841,000    | 92,308    | 415,000    | 160,390   | 3                               | 0     | 0                    | 0                 | 0       | 0     | 3       |
| Stores—Varnish and oil.....               | 6               | 11,200     | 8,273     | 0          | 0         | 2                               | 0     | 0                    | 1                 | 3       | 3     | 1       |
| Stores—Varnish and oil.....               | 3               | 21,000     | 9,000     | 84,000     | 22,550    | 6                               | 0     | 0                    | 1                 | 3       | 3     | 1       |
| Stores—Varnish and oil.....               | 3               | 77,000     | 9,255     | 30,000     | 12,000    | 0                               | 3     | 0                    | 0                 | 3       | 0     | 3       |
| Stores—Telephone stations.....            | 3               | 7,250      | 178       | 800        | 15        | 2                               | 1     | 0                    | 0                 | 2       | 0     | 2       |
| Stores—Underlating papers.....            | 3               | 40,000     | 8,115     | 10,100     | 7,420     | 0                               | 3     | 0                    | 0                 | 3       | 1     | 1       |
| Stores—Warehouses.....                    | 66              | 866,017    | 89,912    | 1,065,607  | 166,083   | 31                              | 14    | 1                    | 15                | 47      | 15    | 41      |
| Stores—Water tanks and works.....         | 2               | 400        | 79        | 4,000      | 150       | 1                               | 1     | 0                    | 0                 | 1       | 0     | 1       |
| Y. M. C. A.....                           | 1               | 68,400     | 2,405     | 10,000     | 1,500     | 1                               | 0     | 0                    | 0                 | 1       | 0     | 1       |
| Totals.....                               | 5,353           | 44,564,695 | 5,823,255 | 18,612,898 | 6,739,758 | 4,464                           | 823   | 177                  | 1,269             | 3,050   | 957   | 5,239   |

|                                   |       |            |           |            |           |       |     |     |       |       |     |       |
|-----------------------------------|-------|------------|-----------|------------|-----------|-------|-----|-----|-------|-------|-----|-------|
| Stores—Lighting fixtures.....     | 2     | 15,000     | 344       | 28,000     | 3,717     | 0     | 3   | 0   | 0     | 3     | 0   | 3     |
| Stores—Millinery.....             | 27    | 96,700     | 26,528    | 75,500     | 31,490    | 14    | 11  | 0   | 0     | 17    | 6   | 13    |
| Stores—Millinery.....             | 13    | 151,000    | 26,489    | 127,272    | 62,218    | 9     | 1   | 0   | 0     | 0     | 0   | 10    |
| Stores—Shoes.....                 | 11    | 841,000    | 92,308    | 415,000    | 160,390   | 3     | 0   | 0   | 0     | 0     | 0   | 3     |
| Stores—Varnish and oil.....       | 6     | 11,200     | 8,273     | 0          | 0         | 2     | 0   | 0   | 1     | 3     | 3   | 1     |
| Stores—Varnish and oil.....       | 3     | 21,000     | 9,000     | 84,000     | 22,550    | 6     | 0   | 0   | 1     | 3     | 3   | 1     |
| Stores—Varnish and oil.....       | 3     | 77,000     | 9,255     | 30,000     | 12,000    | 0     | 3   | 0   | 0     | 3     | 0   | 3     |
| Stores—Telephone stations.....    | 3     | 7,250      | 178       | 800        | 15        | 2     | 1   | 0   | 0     | 2     | 0   | 2     |
| Stores—Underlating papers.....    | 3     | 40,000     | 8,115     | 10,100     | 7,420     | 0     | 3   | 0   | 0     | 3     | 1   | 1     |
| Stores—Warehouses.....            | 66    | 866,017    | 89,912    | 1,065,607  | 166,083   | 31    | 14  | 1   | 15    | 47    | 15  | 41    |
| Stores—Water tanks and works..... | 2     | 400        | 79        | 4,000      | 150       | 1     | 1   | 0   | 0     | 1     | 0   | 1     |
| Y. M. C. A.....                   | 1     | 68,400     | 2,405     | 10,000     | 1,500     | 1     | 0   | 0   | 0     | 1     | 0   | 1     |
| Totals.....                       | 5,353 | 44,564,695 | 5,823,255 | 18,612,898 | 6,739,758 | 4,464 | 823 | 177 | 1,269 | 3,050 | 957 | 5,239 |



TABLE NO. III.

Containing a Summary of the Origin and Cause of the Various Fires Reported, the Number of Each, and the damage to the Buildings and Contents, for the Year 1922.

| Cause  | Number<br>Fires | Loss        |
|--|-----------------|-------------|
| Arsoning                                       | 447             | \$1,210,716 |
| Asbes or live coals against wood               | 40              | 18,071      |
| Asphalt cement explosion                       | 2               | 5,730       |
| Automobile lockfire and carburetor leak        | 41              | 19,488      |
| Blasting                                       | 1               | 489         |
| Blow and oil fumes                             | 13              | 4,999       |
| Bouffee  | 32              | 7,711       |
| Brooder lamp                                   | 13              | 7,741       |
| Burning grass, leaves and weeds                | 21              | 5,080       |
| Burning rubbish, paper and waste               | 29              | 9,392       |
| Candle carelessness                            | 8               | 30          |
| Charcoal burner                                | 1               | 429         |
| Children playing with matches and fire         | 78              | 25,859      |
| Clothing and bedding near stove and stove pipe | 22              | 7,308       |
| Coffee urn                                     | 3               | 3,173       |
| Curtains blown into flame                      | 12              | 13,364      |
| Defective electric appliances                  | 6               | 786         |
| Defective electric lighting fixtures           | 7               | 801         |
| Defective electric wires                       | 198             | 211,693     |
| Defective fans                                 | 294             | 341,432     |
| Defective gas and electric meters              | 2               | 2,486       |
| Defective gas and gasoline water heaters       | 9               | 849         |
| Defective gasoline lighting systems            | 2               | 2,332       |
| Defective gasoline tanks                       | 2               | 1,982       |
| Defective heating plants, etc.                 | 33              | 37,261      |
| Defective oil and gasoline stoves              | 23              | 5,191       |
| Defective pipes to stoves, etc.                | 120             | 90,474      |
| Defective radio system                         | 1               | 19          |
| Electric auto and trucks with current on       | 3               | 3,980       |
| Electric irons                                 | 20              | 9,742       |
| Feed cutler                                    | 1               | 300         |
| Filling tank with motor running                | 1               | 21          |
| Film   | 4               | 724         |
| Fireworks                                      | 48              | 17,429      |
| Frickton                                       | 16              | 25,446      |
| Fumigation                                     | 7               | 1,130       |
| Furnace, coal and gas stove explosions         | 12              | 64,616      |
| Gasoline or coal oil to start fire             | 11              | 25,446      |
| Gas explosions                                 | 9               | 6,474       |
| Gasoline and volatile oil explosions           | 50              | 49,323      |
| Gasoline and oil stove carelessness            | 83              | 69,467      |
| Gasoline and oil stove explosions              | 43              | 40,200      |
| Grease, paint and tar boiling over             | 23              | 13,219      |
| Insulation                                     | 6               | 1,431       |
| Insulatory and probably incendiary             | 120             | 692,384     |
| Kilo, china                                    | 1               | 209         |
| Lamp explosion and carelessness                | 14              | 17,427      |
| Lantern carelessness and explosion             | 17              | 21,198      |
| Lightning, no rods                             | 105             | 292,248     |
| Lightning, with rods                           | 4               | 11,423      |
| Lightning running in on wires                  | 8               | 781         |
| Line striking                                  | 1               | 123         |
| Match carelessness                             | 73              | 19,949      |
| Matchbox and mice (supposed)                   | 1               | 74          |
| Oil burners, furnace and stoves                | 6               | 8,927       |
| Overheated lake and cooler ovens               | 1               | 43          |
| Overheated clothes dryer                       | 1               | 1,799       |
| Overheated coffee roaster                      | 130             | 213,227     |
| Overheated furnace and stoves                  | 17              | 12,212      |
| Overheated motors and boilers                  | 4               | 211         |
| Rendering kettle                               | 107             | 45,134      |
| Smokers' carelessness                          | 3               | 235         |
| Smoking meat                                   | 3               | 74          |
| Smoking out bees                               | 1               | 100         |
| Soldering stove                                | 1               | 82          |
| Sparks from electric motor                     | 21              | 96,020      |
| Sparks from engines and locomotives            | 1,610           | 267,294     |
| Sparks from fuses                              | 29              | 20,298      |
| Sparks from open fire hole on roof, etc.       | 1               | 600         |
| Sparks from tank heater                        | 1               | 20          |
| Sparks from welding                            | 1               | 30          |

TABLE NO. III.—CONTINUED.

| Cause                          | Number<br>Fires | Loss         |
|--------------------------------|-----------------|--------------|
| Spontaneous combustion         |                 |              |
| Baked and loose paper          | 4               | 227          |
| Carbide                        | 2               | 1,170        |
| Chafes, cotton and rags        | 19              | 25,010       |
| Coal and coals                 | 18              | 37,964       |
| Fertilizer                     | 2               | 926          |
| Grain, fodder and coals        | 6               | 10,325       |
| Hay and straw                  | 46              | 162,087      |
| Only rags, rags and paint      | 37              | 45,411       |
| Rubbish, carbide and saw dust  | 29              | 18,422       |
| Sweeping compound              | 1               | 214          |
| Twine                          | 1               | 35           |
| State electricity              | 1               | 8,765        |
| Stove blacking explosion       | 1               | 20           |
| Stove or furnace too near wood | 7               | 3,834        |
| Sun's rays on fireworks        | 10              | 9,794        |
| Thawing water pipes and pumps  | 1               | 7,865        |
| Tramps and thieves             | 5               | 5,069,630    |
| Unknown                        | 1,228           | 5,069,630    |
| Vulcanizing machine            | 1               | 330          |
| Whiskey stills                 | 4               | 9,130        |
| Total                          | 5,352           | \$10,131,011 |

TABLE NO. IV.

Giving the Cities and Towns in Which 1,225 Inspections Were Made of Dilapidated Buildings and Inflammable Conditions During the Year 1922.

|                     |                 |                  |
|---------------------|-----------------|------------------|
| Adel                | Garner          | Osceola          |
| Agency              | Gazka           | Oskalooza        |
| Akron               | Glenwood        | Ottumwa          |
| Albia               | Glidden         | Paullina         |
| Alden               | Gowrie          | Pella            |
| Algona              | Grand Junction  | Perry            |
| Allerton            | Gravety         | Pleasantville    |
| Alta                | Grimes          | Pocahontas       |
| Ames                | Grinnell        | Portsmouth       |
| Anamosa             | Griswold        | Postville        |
| Ankeny              | Hamburg         | Prairie City     |
| Atlantic            | Hamilton        | Red Oak          |
| Auburn              | Hampton         | Rippey           |
| Beaman              | Harper          | Riverside        |
| Belle Plaine        | Hastings        | Rock Rapids      |
| Bellevue            | Henderson       | Rockwell City    |
| Berkley             | Holly Springs   | Rodman           |
| Blairstown          | Hopkinton       | Sac City         |
| Blakesburg          | Indianola       | Seranton         |
| Boone               | Iowa City       | Sheldahl         |
| Brighton            | Iowa Falls      | Sibley           |
| Britt               | Jefferson       | Sidney           |
| Brooklyn            | Jepp            | Sigourney        |
| Calmar              | Jewell          | Silver City      |
| Carlisle            | Keokuk          | Sioux City       |
| Carroll             | Keosauqua       | Slater           |
| Cedar Rapids        | Keystone        | Smithland        |
| Center Junction     | Knoxville       | Spencer          |
| Centerville         | Lake City       | Spirit Lake      |
| Chariton            | Lake Mills      | Story City       |
| Charter Oak         | Lawler          | Strawberry Point |
| Chester             | Le Mars         | Sutherland       |
| Clear Lake          | Libon           | Tama             |
| Clermont            | Lohrville       | Terrill          |
| Clinton             | McCallsburg     | Thar             |
| Correctionville     | McGregor        | Thornton         |
| Corydon             | Macksburg       | Ulmer            |
| Crasco              | Madrid          | Ute              |
| Creston             | Manilla         | Vail             |
| Curlew              | Manson          | Van Horne        |
| Cushing             | Marshalltown    | Van Meter        |
| Davis City          | Mason City      | Victor           |
| Diagonal            | Maserville      | Villisca         |
| Dunkerton           | Middletown      | Vinton           |
| Earlville           | Minburn         | Washington       |
| East Pleasant Plain | Missouri Valley | Wauke            |
| Eddyville           | Mitchellville   | Waverly          |
| Eldon               | Monticello      | Webster City     |
| Eldora              | Moravia         | West Liberty     |
| Elma                | New Ayr         | West Side        |
| Emmetsburg          | Muscatine       | West Union       |
| Fairfield           | Neola           | What Cheer       |
| Farnhamville        | New Sharon      | Whittemore       |
| Galva               | Newton          | Williamsburg     |
| Garden City         | Norwalk         | Winterset        |
| Gardiner            | Osella          | Woden            |
|                     | Orange City     | Woolstock        |

TABLE NO. V.

Giving Places at Which Investigations of Fires of Suspicious Origin Have Been Made During the Year 1922, and the Date When Such Investigation Began.

| County | Place                     | Date Commencing Investigation |
|--------|---------------------------|-------------------------------|
| Adair  | Adair                     | May 4                         |
| Adair  | Strossville               | June 21                       |
| Adair  | Eden Township             | October 21                    |
| Adair  | Eden Township             | November 1                    |
| Adair  | Shellsburg (near S. line) | September 25                  |
| Adair  | Vinton                    | April 8                       |
| Adair  | Waterloo                  | February 1                    |
| Adair  | Waterloo                  | July 17                       |
| Adair  | Waterloo                  | July 17                       |
| Adair  | Waterloo                  | July 20                       |
| Adair  | Boone (near)              | March 15                      |
| Adair  | Douglas Township          | June 15                       |
| Adair  | Gardner Township          | February 10                   |
| Adair  | Madison                   | September 3                   |
| Adair  | Aplington                 | August 4                      |
| Adair  | Aplington (near)          | August 4                      |
| Adair  | New Hartford              | May 24                        |
| Adair  | Butler Township           | June 16                       |
| Adair  | Garfield Township         | June 16                       |
| Adair  | Jolley                    | June 16                       |
| Adair  | Lake City                 | July 24                       |
| Adair  | Lake City                 | November 24                   |
| Adair  | Twin Lakes Township       | June 14                       |
| Adair  | Twin Lakes Township       | June 16                       |
| Adair  | Breda (near)              | August 9                      |
| Adair  | Glidden (near) (2 fires)  | June 9                        |
| Adair  | Jasper Township           | December 12                   |
| Adair  | Anda (2 fires)            | December 12                   |
| Adair  | Griswold (near)           | October 31                    |
| Adair  | Wright Township           | October 31                    |
| Adair  | Dayton Township (2 fires) | August 21                     |
| Adair  | Mason City (2 fires)      | January 10                    |
| Adair  | Mason City (3 fires)      | March 1                       |
| Adair  | Mason City                | May 11                        |
| Adair  | Mason City                | July 15                       |
| Adair  | Mason City                | July 22                       |
| Adair  | Rock Falls                | April 13                      |
| Adair  | Lester (2 fires)          | April 14                      |
| Adair  | New Hampton               | April 14                      |
| Adair  | Linton Township (2 fires) | May 26                        |
| Adair  | June 19                   | June 19                       |
| Adair  | Spencer                   | October 27                    |
| Adair  | MacDougal                 | September 8                   |
| Adair  | Camanche (near)           | April 11                      |
| Adair  | Charlotte                 | March 2                       |
| Adair  | Clinton                   | November 15                   |
| Adair  | Goose Lake                | November 21                   |
| Adair  | Lincoln Township          | July 14                       |
| Adair  | Washington Township       | March 4                       |
| Adair  | Dallas                    | December 14                   |
| Adair  | Dallas Center (near)      | August 28                     |
| Adair  | Des Moines Township       | July 5                        |
| Adair  | Ferry                     | June 21                       |
| Adair  | Davis City                | October 28                    |
| Adair  | Colesburg                 | March 10                      |
| Adair  | Burlington                | January 20                    |
| Adair  | Millert                   | December 20                   |
| Adair  | Terrill                   | December 20                   |
| Adair  | West Ossage               | February 15                   |
| Adair  | Dubouque                  | July 23                       |
| Adair  | Clermont                  | July 18                       |
| Adair  | Hawkeye                   | July 19                       |
| Adair  | Hawkeye (near)            | September 19                  |
| Adair  | Hawkeye (near) (2 fires)  | January 20                    |
| Adair  | Osweiss (near)            | June 20                       |
| Adair  | Osweiss                   | December 5                    |
| Adair  | Charles City (2 fires)    | March 28                      |
| Adair  | Hamburg                   |                               |

TABLE NO. V.—CONTINUED.

| County     | Place                      | Date Commencing Investigation |
|------------|----------------------------|-------------------------------|
| Green      | Jackson Township           | March 9                       |
|            | Jefferson                  | August 17                     |
|            | Sarasota                   | February 25                   |
| Grady      | Fairfield Township         | October 17                    |
|            | Grady Center               | December 7                    |
| Outlier    | Stuart                     | March 13                      |
| Hamilton   | Stratford (near)           | May 16                        |
| Hancock    | Woden                      | February 13                   |
| Harrison   | Logan (near)               | June 7                        |
|            | Missouri Valley            | April 21                      |
| Howard     | Chester                    | November 16                   |
|            | Creco                      | January 17                    |
|            | Elma (2 fires)             | November 17                   |
|            | Marengo                    | March 3                       |
| Iowa       | Marengo (near)             | August 17                     |
|            | Parnell (near)             | August 16                     |
|            | Williamsburg (near)        | February 2                    |
|            | Williamsburg (near)        | February 2                    |
|            | Williamsburg (near)        | August 15                     |
| Jackson    | Bellevue                   | September 1                   |
| Jasper     | Independence Township      | August 25                     |
|            | Lynville (near)            | June 23                       |
|            | Newton                     | May 19                        |
| Jefferson  | Fairfield (near)           | April 5                       |
| Johann     | Iowa City (near) (2 fires) | March 3                       |
|            | Iowa City                  | June 26                       |
|            | Oxford (near)              | August 21                     |
|            | Union Township             | August 21                     |
| Kekuk      | Chic                       | August 16                     |
|            | Pekin (near)               | March 1                       |
| Lee        | Kekuk (2 fires)            | April 7                       |
|            | Kekuk                      | December 5                    |
| Linn       | Cedar Rapids               | January 21                    |
|            | Cedar Rapids               | December 11                   |
|            | Marion                     | June 9                        |
|            | Marion                     | October 4                     |
|            | Marion                     | December 26                   |
| Linn       | Chariton                   | February 14                   |
|            | Pleasant Township          | January 26                    |
| Lyon       | Lyon Township              | February 17                   |
| Madison    | Walnut Township            | January 17                    |
| Mahaska    | Cedar Township             | January 31                    |
|            | Oskosh                     | December 18                   |
|            | Wright (near)              | February 24                   |
| Marion     | Hamilton                   | February 7                    |
|            | Keosauqua                  | July 25                       |
|            | Keosauqua                  | July 25                       |
|            | Keosauqua                  | November 3                    |
|            | Pella                      | July 26                       |
|            | Peeding                    | August 15                     |
| Marshall   | Albia (near)               | April 14                      |
| Monona     | Mapleton                   | January 13                    |
| Monroe     | Albia (2 fires)            | May 1                         |
|            | Crest                      | January 14                    |
| Monroe     | Montpelier (near)          | February 16                   |
|            | Montpelier (near)          | January 12                    |
|            | Mansfield                  | April 10                      |
|            | Pleasant Prairie           | February 18                   |
| O'Brien    | Archer (near)              | June 20                       |
|            | Sachsen                    | September 15                  |
| Palo Alto  | Graettinger (near)         | May 25                        |
|            | Ringstedt (near)           | May 25                        |
|            | West Bend                  | December 27                   |
| Plymouth   | America Township           | June 22                       |
|            | Le Mars                    | June 22                       |
| Pocahontas | Preston Township           | September 9                   |
|            | Linnola Township           | October 10                    |
|            | Pocahontas                 | January 30                    |

TABLE NO. V.—CONTINUED.

| County        | Place                    | Date Commencing Investigation |
|---------------|--------------------------|-------------------------------|
| all County    | Campbell (near)          | January 31                    |
|               | Crepe Township           | January 15                    |
|               | Des Moines               | February 8                    |
|               | Des Moines               | February 9                    |
|               | Des Moines (2 fires)     | March 17                      |
|               | Des Moines               | March 26                      |
|               | Des Moines               | April 22                      |
|               | Des Moines               | April 25                      |
|               | Des Moines               | May 1                         |
|               | Des Moines               | May 18                        |
|               | Des Moines               | May 31                        |
|               | Des Moines               | June 22                       |
|               | Des Moines               | July 10                       |
|               | Des Moines               | July 30                       |
|               | Des Moines               | October 23                    |
|               | Des Moines               | November 27                   |
|               | Elkhart                  | September 25                  |
|               | Ex. Des Moines           | September 25                  |
|               | Grimes                   | July 11                       |
|               | Jefferson Township       | October 10                    |
| Pottawattamie | Council Bluffs           | March 21                      |
|               | Council Bluffs           | April 19                      |
|               | Council Bluffs           | December 15                   |
|               | Council Bluffs (2 fires) | December 21                   |
|               | Council Bluffs           | December 27                   |
| Poweshiek     | Deep River Township      | December 27                   |
|               | Grinnell                 | February 24                   |
|               | Montgomery               | June 22                       |
|               | Diagonal (2 fires)       | January 18                    |
| Ringgold      | Davenport                | March 15                      |
| Scott         | Davenport                | June 29                       |
|               | Davenport                | July 7                        |
| Shelby        | Parsons (near)           | January 29                    |
|               | Rock Valley              | February 16                   |
|               | Ames                     | February 21                   |
| Story         | Ames                     | August 5                      |
|               | Ames                     | December 4                    |
|               | Ames                     | December 18                   |
|               | Zearing                  | March 24                      |
|               | Lorimer (near)           | March 5                       |
|               | Lorimer (near)           | March 8                       |
|               | Bentonsport              | March 17                      |
| Van Buren     | Bentonsport              | December 5                    |
| Wapella       | Center Township          | February 17                   |
|               | Ottumwa                  | June 10                       |
|               | Ottumwa                  | August 29                     |
|               | Ottumwa                  | October 26                    |
| Warren        | Prole (2 fires)          | December 26                   |
| Washington    | Washington               | February 1                    |
|               | West Chester             | January 10                    |
| Wayne         | Albion                   | May 14                        |
|               | Seymour                  | July 25                       |
| Webster       | Calender (near)          | October 14                    |
|               | Fl. Dodge                | August 14                     |
| Woodbury      | Sioux City (2 fires)     | July 28                       |
|               | Sioux City               | July 27                       |
|               | Sioux City               | July 28                       |
|               | Sioux City               | August 1                      |
|               | Sioux City               | September 4                   |
|               | Sioux City               | September 7                   |
|               | Sioux City               | September 10                  |
|               | Sioux City               | September 10                  |
|               | Sioux City               | September 12                  |
|               | Sioux City               | October 13                    |
| Wright        | Belmond                  | April 11                      |