\$103.50, aggregating the sum of \$184.00, or so much thereof as may be necessary to pay the irrigation or water tax on the East one-half of the Southeast Quarter of Section 36, Township 155, North of Range 101, West of the Fifth P. M., Williams County, North Dakota, for the years 1921 and 1922, respectively.

Approved March 9, 1921.

ARTESIAN WATERS

CHAPTER 17.

(H. B. No. 41-Shimmin.)

ARTESIAN WATERS.

An Act Providing for the preservation and control of the Artesian Waters of the state.

Be It Enacted by the Legislative Assembly of the State of North Dakota:

- § 1. Every person, stock company, association or corporation owning or controlling the real estate upon which is located an artesian, or flowing well, shall, within sixty days after the passage of this act, provide for each such well a valve, or valves, capable of controlling the discharge from such well and shall keep said valve, or valves, so adjusted that only such supply of water shall escape as is necessary for ordinary use by the owner of or the person in control of, said land in conducting his business, provided, however, that in the winter such flow may be permitted as will prevent freezing of the well, and in those cases where it is necessary a sufficient flow may be allowed to prevent clogging of the well.
- § 2. Every person, stock company, association or corporation which shall drill an artesian, or flowing well, shall drill a small smooth hole thru the cap-rock to closely fit the pipe, and shall use every possible means to seal around the main pipe in such a manner that no water can escape from the flow. No dynamite or other explosives shall be used in penetrating the water covering payer (cap-rock.) This does not apply to boulders of granite or other obstacles in non-water bearing horizons. Where the top part of the water-bearing layers of any given flow are soft and crumbling, yielding muddy or sandy flow, the driller may not end the well at this level; but must test the layers by boring on down a reasonable distance, from 5 to 25 feet at least, and more if the owner of the land require, to locate a terminus in a firm sandrock which will stand firm, preventing dirty flow and permit regulation of the flow. Once the firm stratum is located the driller shall attach in

it at the end of the well pipe, a strainer of non-corrosive material, with numerous small perforations to insure clear pure water and non-clogging. If the owner request, the driller must place a valve below frost level with a handle reaching to the surface so that well may be entirely shut off at will. He shall extend the outside or surface casing to, and fit same solidly into, the shale or hard clay formation a sufficient distance to entirely prevent a flow around the casing. He shall seal between casing and pipe.

- § 3. In cases of new wells in any soft formation where clay, sand or any sediment is liable to cause clogging, the valve may be left open until the well has sufficiently cleared. It shall then be finally adjusted to normal condition. This act shall apply to all "wild" wells, or wells out of control due to rusted pipes, improper construction, etc., however, if it be determined that such well can not be repaired, no valve shall be attached, but every effort shall be made by the owner to seal, plug or cut off same, when in the estimation of the State Geologist it will cause no loss other than reasonable amount of repair cost. Old wells which might be damaged by so doing may not be shut off, but such wells must be put in repair at the earliest possible date and be regulated thereafter.
- § 4. The owner or person in control of an artesian, or flowing-well, who shall allow the same to flow without a valve or sufficient contrivance for checking the flow, as required by law, or without proper repair of pipes, valves, etc., or who shall interfere with the same when properly adjusted by the proper authority, or shall permit the water to waste unnecessary, or shall interfere with any officer duly authorized to inspect the same or measure its flow or pressure, shall be guilty of a misdemeanor and on conviction thereof shall be punished by a fine not less than five dollars and not to exceed fifty (\$50.00) dollars, at the discretion of the court. The provisions of this section shall also apply to the officer or board in charge of wells belonging to the state, or any county, township or municipality.
- § 5. The county and township assessors shall list all artesian, or flowing wells, in their respective districts each year at time of making the assessment, giving the quarter section on which each is situated, the owner, with his address, also as far as possible, the diameter, depth to the main flow, and size of flow. This data is to be forwarded by the county auditor to the state geologist or his deputy. Hereafter in case of new flowing wells, the driller shall also file with the state geologist or deputy all of the foregoing data, and any other valuable data, as to the formation. This shall be done within two weeks after the completion of the well.
- § 6. The state geologist or his deputy shall have the general oversight and supervision of the waters of the state, and shall advise the citizens of the state as to the practicability of measures affecting the underground waters of the state. It shall be his duty to counsel

and consult with the owner and assist him to work out the most desirable control and use of his well. He shall select at least three representative flowing wells in each county having that number, and as many more as he may deem advisable, and he shall cause the record of their flows and pressures to be taken from time to time, to learn as much as possible of the decline, fluctuations and permanence of the artesian supply, and also plan and conduct such other investigations as he may find advisable to ascertain the best method of prolonging the utility of the same. He shall keep a record of the location, size, depth, flow, size of flow, character of water, construction and history of all artesian wells of the state, and keep it on file for public reference. He shall secure the enforcement of all laws pertaining to artesian and phreatic waters of the state. He shall publish from time to time, as he may deem advantageous, bulletins containing information concerning the artesian wells and phreatic waters of the state. The state geologist and state engineer and the county superintendent of schools where such well is located, as the majority shall determine, shall make such additional reasonable rules and regulations, and they shall each receive \$10.00 per day and actual traveling expenses.

- § 8. Enforcement of this act shall be in the charge of the state geologist or his deputy, who shall be a specialist, skilled in the control of flow and pressure, and of methods of construction of artesian wells. There shall be appropriated from state funds not otherwise appropriated the sum of \$2,500.00 biennially for the purpose of carrying out this Act. An appeal from the geologist's ruling may be had, if made within five days to a board of arbitration consisting of the state engineer, assistant state geologist who shall review the matter and render final orders.
- § 9. The deputy who shall be appointed by the State Geologist may be removed for cause, and whose salary shall be \$10.00 for each day and actual traveling expenses.
- § 10. EMERGENCY.] Whereas, an emergency exists this act shall be in full force and effect after its passage and approval.

Approved March 10, 1921.