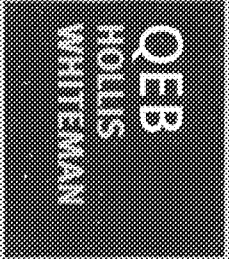


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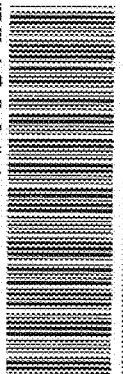
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## Coroners - How they work

This describes who coroners are, what they do, the legal powers under which they operate, the how they go about meeting their objectives.

This is designed to be a guide to the work of Coroners and is not definitive.

### WHO ARE CORONERS?

#### WHAT DOES THE CORONER DO?

#### ARE ALL DEATHS REPORTED TO THE CORONER?

#### WHEN IS A DEATH REPORTED TO THE CORONER?

#### HOW ARE DEATHS REPORTED?

#### WHAT WILL THE CORONER DO WHEN A DEATH IS REPORTED?

#### IF THE DEATH IS NOT DUE TO A NATURAL CAUSE?

#### WHAT IS THE PURPOSE OF AN INQUEST?

#### WILL THE INQUEST DECIDE WHO IS TO BLAME?

#### WHAT HAPPENS IF SOMEBODY HAS BEEN CHARGED WITH CAUSING THE DEATH?

#### WHAT ABOUT OTHER COURT PROCEEDINGS?

#### IS THERE ALWAYS A JURY AT THE INQUEST?

#### WHO DECIDES WHICH WITNESS TO CALL?

#### MUST A WITNESS ATTEND COURT?

#### WHO CAN ASK A WITNESS QUESTIONS?

#### WHAT ARE THE POSSIBLE VERDICTS?

#### IS LEGAL AID AVAILABLE?

#### WILL THE INQUEST BE REPORTED IN THE PAPERS?

#### CAN THE FUNERAL BE HELD BEFORE THE INQUEST IS FINISHED?

#### CAN A DEATH CERTIFICATE BE GIVEN BEFORE THE INQUEST IS FINISHED?

#### IS THE CORONER CONCERNED WITH ORGAN TRANSPLANTS?

#### CAN A REPORT OF THE INQUEST BE OBTAINED?

#### DOES THE CORONER HAVE ANY OTHER FUNCTIONS IN RELATION TO A DEATH?

#### WHERE CAN I GET MORE INFORMATION ABOUT THE CORONER'S PROCEEDINGS?

### WHO ARE CORONERS?

1. Coroners are independent judicial officers in England and Wales who must follow laws which apply to coroners and inquests. Each coroner has a deputy and one of them must be available at all times to deal with matters relating to the inquest and post mortems. Although they are appointed by, and paid for, by local councils, they are not local government officers, but hold office under the Crown. They are either lawyers or doctors.

### WHAT DOES THE CORONER DO?

2. Coroners enquire into those deaths reported to them. They will seek to establish the medical cause of death; if the cause remains in doubt after a post mortem, an inquest will be held.

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### ARE ALL DEATHS REPORTED TO THE CORONER?

3. No. In most cases, a GP or hospital doctor can issue a Medical Certificate of the cause of death and the death can be registered by the Registrar of Births and Deaths, who will issue the Death Certificate in the



usual way.

#### WHEN IS A DEATH REPORTED TO THE CORONER?

4. When the death was sudden, or unexpected, violent or unnatural, occurred during an operation, was due to an industrial disease, or when no doctor has treated the deceased during his or her last illness.

#### HOW ARE DEATHS REPORTED?

5. Deaths are usually reported to the coroner by the police or by a doctor called to the death if it is sudden. But a doctor will also report a patient's death if unexpected. In other cases, the local registrar of deaths may make the report.

6. Whenever the death has been reported to the coroner the registrar must wait for the coroner to finish his or her enquiries before the death can be registered. These enquiries may take time, so it is always best to contact the coroner's office before any funeral arrangements are made.

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#### WHAT WILL THE CORONER DO WHEN A DEATH IS REPORTED?

7. The coroner may decide that death was quite natural and that there is a doctor who can sign a form saying so. In this case the coroner will advise the registrar.

8. The coroner may ask a pathologist to examine the body. If so, the examination must be done as soon as possible. The coroner or his staff will, unless it is impracticable or cause undue delay, give notice of the arrangement to, amongst others, the usual doctor of the deceased, and any relative who may have notified the coroner of his or her wish to be medically represented at the examination. If the examination shows death to have been a natural one, there may be no need for an inquest and the coroner will send a form to the registrar of deaths so that the death can be registered by the relatives and a certificate of burial issued by the registrar. If the person is to be cremated, the certificate may be signed by the coroner.

#### IF THE DEATH IS NOT DUE TO A NATURAL CAUSE?

9. The coroner will hold an inquest.

#### WHAT IS THE PURPOSE OF AN INQUEST?

10. The inquest is a limited fact-finding inquiry to establish the answers to **who** has died,

**when** and **where** the death occurred, and

**how** the cause of death arose

information needed by the registrar of deaths, so that the death can be registered

An inquest is usually opened to record that a death has occurred to identify the dead person and to issue the documents required for the burial or cremation. It will then be adjourned until any police enquiries and coroner's investigations are completed. The full inquest can then be resumed.

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#### WILL THE INQUEST DECIDE WHO IS TO BLAME?

11. No. An inquest is not a trial. It is an inquiry into the facts surrounding a death. It is not the job of the coroner to blame anyone for the death, as a trial would do, and there are no speeches. However, the Coroner does have the power to investigate not just the main cause of death, but also "any acts or omissions which directly led to the cause of death".

#### WHAT HAPPENS IF SOMEBODY HAS BEEN CHARGED WITH

### CAUSING THE DEATH?

12. Where a person has been charged with murder or manslaughter, 'child destruction' (killing a foetus after 26 weeks), infanticide, causing death by reckless driving or taking part in another person's suicide, the inquest is postponed until the person's trial is over. Before adjourning, the coroner finds out who the deceased was and how he or she died.

After the criminal proceedings, the coroner **may** restart the inquest. If the coroner decides not to hold an inquest, the Registrar of Deaths is given a certificate with the result of the criminal proceedings, so that they can register the death.

### WHAT ABOUT OTHER COURT PROCEEDINGS?

13. Any other court proceedings will normally **follow** the inquest. When all the facts about the cause of death are known, then a person may be brought before another court, or a claim for damages made. The inquest may be of help to the family of the deceased in finding out what happened. The information obtained may also help to avoid similar accidents in future.

### IS THERE ALWAYS A JURY AT THE INQUEST?

14. No, most inquests are held without a jury. A jury is needed if:
- the person died in prison;
  - the death was caused by an occurrence that needs to be reported to a Government department;
  - the death occurred in circumstances which may affect the health or safety of the public; or
  - the coroner thinks it is necessary to have a jury.

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### WHO DECIDES WHICH WITNESSES TO CALL?

15. The coroner decides who to ask and the order in which they give evidence. Anyone who wants to give evidence can come forward at an inquest without being summonsed by the coroner, but the evidence must be relevant to the inquest... A person who wants to give evidence should contact the coroner as soon as possible after the death.

### MUST A WITNESS ATTEND COURT?

16. Yes. The evidence of a witness may be vital in preventing injustice, and they may have to pay a penalty if they do not attend. A witness will normally receive a formal summons to attend the inquest. A witness who does not attend when they are summonsed may be fined. Repeated failure to attend may result in imprisonment. In certain circumstances, a signed statement or other document may be given in evidence. The person or people suspected of causing a death **if required to give evidence at the inquest will be protected against answering any question which may tend to incriminate him.**

All evidence is given under oath.

### WHO CAN ASK A WITNESS QUESTIONS?

17. Anyone who has "a proper interest" may question a witness at the inquest. They may be represented by lawyers or, if they prefer, ask questions themselves. The questions must be sensible and relevant. This is something the coroner will decide. There are no speeches.

18. "Properly interested people" would normally include
- a parent, spouse, child and anyone acting for the deceased;
  - anyone who gains from a life insurance policy on the deceased;
  - any insurer having issued such a policy;

anyone whose actions the coroner believes may have contributed to the death (for example, an employer or a motorist causing death);

the chief officer of police (who may only ask witnesses questions through a lawyer);

any person appointed by a government department to attend the inquest;

anyone else who the coroner may decide also has a 'proper interest'.

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#### **WHAT ARE THE POSSIBLE VERDICTS?**

19. Possible verdicts include:

natural causes

accident

suicide

unlawful or lawful killing

Industrial disease

open verdicts (where there is insufficient evidence for any other verdict)

Sometimes the inquest will show that something needs to be done to prevent a recurrence. The coroner can draw attention to this publicly and will write to someone in authority about it, for example the council or a government department

#### **IS LEGAL AID AVAILABLE?**

20. Legal aid is not **normally** available to cover representation at the inquest. However, legal advice under the "Green Form" scheme may be obtained by those whose means are within the qualifying limits.

#### **WILL THE INQUEST BE REPORTED IN THE PAPERS?**

21. All inquests must be held in public and the press can be present. The coroner knows that every death is a personal tragedy and tries to treat each one sympathetically. The inquest's aim is to get at the truth, and it can often help to stop the spread of untrue stories about the death. Suicide notes and personal letters will not be read out unless they have to be, but although every attempt is made to avoid any upset to people's private lives, sometimes, in the interests of justice, it may be unavoidable.

#### **CAN THE FUNERAL BE HELD BEFORE THE INQUEST IS FINISHED?**

22. Yes, the funeral can take place before the inquest. However, delays can arise if someone has been charged with an offence of causing the death.

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#### **CAN A DEATH CERTIFICATE BE GIVEN BEFORE THE INQUEST IS FINISHED?**

23. Not normally. However, when the inquest has been adjourned after someone has been charged with causing the death, a certificate can be issued. The coroner may provide an interim certificate of the fact of death so as to assist the personal representatives in looking after the estate.

#### **IS THE CORONER CONCERNED WITH ORGAN TRANSPLANTS?**

24. If the death has been referred to the coroner, the coroner must be asked to agree to the removal of the organ, since the removal could affect some important evidence. Decisions can usually be made quickly.



**CAN A REPORT OF THE INQUEST BE OBTAINED?**

25. When the inquest has been completed a person who has a proper interest in the inquiry may apply to see the notes written by the coroner during or after the inquest, or may have a copy of the notes on payment of a fee. In some cases there may be a tape-recording, or transcript, of the hearing.

**DOES THE CORONER HAVE ANY OTHER FUNCTIONS IN RELATION TO A DEATH?**

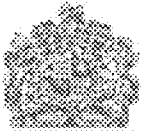
26. The coroner must be notified in every case when a body is to be taken out of England and Wales (whether or not there has been an inquest), and four clear days are allowed for his or her reply, unless written permission is obtained sooner. There is no fee for this. When a body has been brought into England and Wales from another country the coroner may be able to give some help in finding the cause of death and may be required to hold an inquest.

**WHERE CAN I GET MORE INFORMATION ABOUT THE CORONER'S PROCEEDINGS**

27. From the local coroner's office. This is usually listed in the telephone directory. Alternatively, the local police or the Citizen's Advice Bureau will be able to say where the office is situated.

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## H.M. Coroner for Surrey



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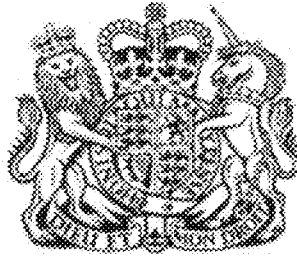
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# Coroners Act 1988

## 1988 CHAPTER 13

### ARRANGEMENT OF SECTIONS

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2. Qualifications for appointment as coroner.
3. Terms on which coroners hold office.
4. Coroners' districts.
5. Jurisdiction of coroners.

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Schedule 1 Salaries and pensions

Schedule 2 Coroner of the Queen's household

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An Act to consolidate the Coroners Acts 1887 to 1980 and certain related enactments, with amendments to give effect to recommendations of the Law Commission.

[10th May 1988]

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

*Coroners*

**1 Appointment of coroners**

- (1) Coroners shall be appointed for each coroner's district in a metropolitan county or Greater London, for each non-metropolitan county and for the City and shall be so appointed by the relevant council, that is to say—
  - (a) in the case of a coroner's district consisting of or included in a metropolitan district or London borough, the council of that district or borough;
  - (b) in the case of a coroner's district consisting of two or more metropolitan districts or London boroughs, such one of the councils of those districts or boroughs as may be designated by



- an order made by the Secretary of State by statutory instrument;
- (c) in the case of a non-metropolitan county, the council of that county; and
  - (d) in the case of the City, the Common Council.
- (2) A relevant council falling within paragraph (a) or (b) of subsection (1) above shall not appoint a coroner except with the approval of the Secretary of State; and a relevant council falling within paragraph (b) of that subsection shall not appoint a coroner except after consultation with the other council or councils in question.
- (3) Subject to subsection (2) above, where a vacancy occurs in the office of coroner, the relevant council shall—
- (a) immediately give notice of the vacancy to the Secretary of State;
  - (b) within three months of the vacancy occurring or within such further period as the Secretary of State may allow, appoint a person to that office; and
  - (c) immediately after making the appointment, give notice of the appointment to the Secretary of State.

## **2 Qualifications for appointment as coroner**

- (1) No person shall be qualified to be appointed as coroner unless he is a barrister, solicitor or legally qualified medical practitioner of not less than five years' standing in his profession.
- (2) A person shall, so long as he is a councillor of a metropolitan district or London borough, and for six months after he ceases to be one, be disqualified for being a coroner for a coroner's district which consists of, includes or is included in that metropolitan district or London borough.
- (3) A person shall, so long as he is an alderman or a councillor of a non-metropolitan county, and for six months after he ceases to be one, be disqualified for being a coroner for that county.
- (4) A person shall, so long as he is an alderman of the City or a common councillor, and for six months after he ceases to be one, be disqualified for being a coroner for the City.

## **3 Terms on which coroners hold office**

- (1) The provisions of Schedule 1 to this Act shall have effect with respect to the payment of salaries and the grant of pensions to coroners.
- (2) Except as authorised by this or any other Act, a coroner shall not take any fee or remuneration in respect of anything done by him in the execution of his office.
- (3) A coroner may resign his office by giving notice in writing to the relevant council, but the resignation shall not take effect unless and until it is accepted by that council.
- (4) The Lord Chancellor may, if he thinks fit, remove any coroner from office for inability or misbehaviour in the discharge of his duty.
- (5) A coroner who is guilty of corruption, wilful neglect of his duty or misbehaviour in the discharge of his duty shall be guilty of an offence and liable on conviction on indictment to imprisonment for a term not exceeding two years or to a fine or to both.
- (6) Where a coroner is convicted of an offence under subsection (5) above, the court may, unless his office as coroner is annexed to any other office, order that he be removed from office and be disqualified for acting as coroner.

## **4 Coroners' districts**

- (1) The Secretary of State may by order divide, amalgamate or otherwise alter the coroners' districts for the time being existing in a metropolitan county or Greater London; and before making any such order, the Secretary of State shall consult the councils and coroners appearing to him to be affected by the order and such other persons as he thinks appropriate.
- (2) The council of a non-metropolitan county may, and shall if directed to do so by the Secretary of State, after complying with such requirements as to notice and consideration of objections as may be prescribed, submit to the Secretary of State a draft order providing—
  - (a) for such alteration of any existing division of the county into coroners' districts as appears to them suitable; or
  - (b) where there is no such division, for the division of the county into such coroners' districts as they think expedient;
 and the Secretary of State, after taking into consideration any objections to the draft made in the

prescribed manner and within the prescribed time, may make the order, either in the terms of the draft submitted to him or with such modifications as he thinks fit.

- (3) If by reason of any order under subsection (2) above it is in the opinion of the Secretary of State necessary that the number of coroners for a non-metropolitan county should be increased,
  - (a) the council shall appoint such number of additional coroners for that county as the Secretary of State may direct; and
  - (b) section 1(3) above shall apply with respect to any such appointment as if a vacancy had occurred in the office of coroner for that county.
- (4) Where a non-metropolitan county is divided into coroners' districts, each of the coroners for that county shall be assigned to one of those districts; and where a non-metropolitan county is not so divided, the following provisions of this Act shall have effect as if the whole of that county were a coroner's district.
- (5) Except as provided by this Act, a coroner appointed for or assigned to a coroner's district—
  - (a) shall for all purposes be regarded as a coroner for the whole administrative area which includes that district; and
  - (b) shall have the same jurisdiction, rights, powers and authorities throughout that area as if he had been appointed as coroner for that area or, as the case may be, had not been assigned to that district.
- (6) The power to make orders under this section shall be exercisable by statutory instrument; and a statutory instrument containing an order under this section shall be laid before each House of Parliament after being made.
- (7) An order under subsection (2) above shall be published in the London Gazette and particulars of any order under that subsection shall be published by the council of the non-metropolitan county in such manner as may be prescribed.
- (8) In this section "prescribed" means prescribed by the Secretary of State either by general rules made by statutory instrument or by directions given as respects any particular occasion.

## 5 Jurisdiction of coroners

- (1) Subject to subsection (3) and sections 7 and 13 to 15 below, an inquest into a death shall be held only by the coroner within whose district the body lies.
- (2) Subject to subsection (3) and section 13 below, a coroner shall hold inquests only within his district.
- (3) A coroner may act as coroner for another district in the same administrative area—
  - (a) during the illness, incapacity or unavoidable absence of the coroner for that district; or
  - (b) where there is a vacancy in the office of coroner for that district;
 and the inquisition returned in respect of an inquest held under this subsection shall certify the cause of the coroner's holding the inquest and shall be conclusive evidence of any matter stated in it which falls within paragraph (a) or (b) above.

### *Deputy coroners*

## 6 Appointment of deputy coroners

- (1) Every coroner—
  - (a) shall appoint as his deputy a person approved by the chairman of the relevant council; and
  - (b) may appoint as his assistant deputy a person so approved.
- (2) A coroner may at any time revoke an appointment made under subsection (1) above; but a revocation of an appointment made under paragraph (a) of that subsection shall not take effect until the appointment of a successor to the deputy has been approved by the chairman of the relevant council.
- (3) The following, namely—
  - (a) every appointment made under subsection (1) above; and
  - (b) every revocation of an appointment made under paragraph (b) of that subsection,
 shall be in writing under the hand of the coroner; and a copy of every such appointment or

revocation shall be sent to the relevant council and be kept with the council's records.

- (4) Subsection (1) of section 2 above shall apply in relation to the office of deputy or assistant deputy coroner as it applies in relation to the office of coroner; and subsections (2) to (4) of that section shall apply in relation to, or to persons holding, the office of deputy coroner as they apply in relation to, or to persons holding, the office of coroner.
- (5) In this section "chairman", in relation to the Common Council, means the Lord Mayor.

## 7 Functions of deputy coroners

- (1) A deputy coroner may act for his coroner in the following cases but no others, namely—
  - (a) during the illness of the coroner;
  - (b) during the coroner's absence for any lawful or reasonable cause; or
  - (c) at an inquest for the holding of which the coroner is disqualified.
- (2) Where a coroner vacates office, his deputy—
  - (a) shall continue in office until a new deputy is appointed;
  - (b) shall act as coroner while the office remains vacant; and
  - (c) shall be entitled to receive in respect of the period of the vacancy the same remuneration as the vacating coroner.
- (3) An assistant deputy coroner—
  - (a) may act as coroner where the deputy coroner would be entitled to act as coroner but is unable so to act owing to illness or absence for any reasonable cause; and
  - (b) where the coroner vacates office, may act for the deputy coroner in like manner while the office of coroner is vacant.
- (4) In relation to an inquest or act which he is authorised to hold or to do, a deputy or assistant deputy to a coroner shall—
  - (a) have the same jurisdiction and powers;
  - (b) be subject to the same obligations, liabilities and disqualifications; and
  - (c) generally be subject to the provisions of this Act and the law relating to coroners in the same manner,
 as if he were the coroner.

### *Inquests: general*

## 8 Duty to hold inquest

- (1) Where a coroner is informed that the body of a person ("the deceased") is lying within his district and there is reasonable cause to suspect that the deceased—
  - (a) has died a violent or an unnatural death;
  - (b) has died a sudden death of which the cause is unknown; or
  - (c) has died in prison or in such a place or in such circumstances as to require an inquest under any other Act,
 then, whether the cause of death arose within his district or not, the coroner shall as soon as practicable hold an inquest into the death of the deceased either with or, subject to subsection (3) below, without a jury.
- (2) In the case of an inquest with a jury—
  - (a) the coroner shall summon by warrant not less than seven nor more than eleven persons to appear before him at a specified time and place, there to inquire as jurors into the death of the deceased; and
  - (b) when not less than seven jurors are assembled, they shall be sworn by or before the coroner diligently to inquire into the death of the deceased and to give a true verdict according to the evidence.
- (3) If it appears to a coroner, either before he proceeds to hold an inquest or in the course of an inquest begun without a jury, that there is reason to suspect—
  - (a) that the death occurred in prison or in such a place or in such circumstances as to require

an inquest under any other Act;

- (b) that the death occurred while the deceased was in police custody, or resulted from an injury caused by a police officer in the purported execution of his duty;
- (c) that the death was caused by an accident, poisoning or disease notice of which is required to be given under any Act to a government department, to any inspector or other officer of a government department or to an inspector appointed under section 19 of the [1974 c. 37.] Health and Safety at Work etc. Act 1974; or
- (d) that the death occurred in circumstances the continuance or possible recurrence of which is prejudicial to the health or safety of the public or any section of the public,

he shall proceed to summon a jury in the manner required by subsection (2) above.

- (4) If it appears to a coroner, either before he proceeds to hold an inquest or in the course of an inquest begun without a jury, that there is any reason for summoning a jury, he may proceed to summon a jury in the manner required by subsection (2) above.
- (5) In the case of an inquest or any part of an inquest held without a jury, anything done by or before the coroner alone shall be as validly done as if it had been done by or before the coroner and a jury.
- (6) Where an inquest is held into the death of a prisoner who dies within a prison, neither a prisoner in the prison nor any person engaged in any sort of trade or dealing with the prison shall serve as a juror at the inquest.

## 9 Qualifications of jurors

- (1) A person shall not be qualified to serve as a juror at an inquest held by a coroner unless he is for the time being qualified to serve as a juror in the Crown Court, the High Court and county courts in accordance with section 1 of the [1974 c. 23.] Juries Act 1974.
- (2) If a person serves on a jury knowing that he is ineligible for such service under Group A, B or C in Part I of Schedule 1 to that Act, he shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 3 on the standard scale.
- (3) If a person serves on a jury knowing that he is disqualified for such service under Part II of that Schedule, he shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 5 on the standard scale.
- (4) The appropriate officer may at any time put or cause to be put to any person who is summoned under section 8 above such questions as he thinks fit in order to establish whether or not the person is qualified to serve as a juror at an inquest.
- (5) Where a question is put to any person under subsection (4) above, if that person—
  - (a) refuses without reasonable excuse to answer;
  - (b) gives an answer which he knows to be false in a material particular; or
  - (c) recklessly gives an answer which is false in a material particular,
 he shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 3 on the standard scale.
- (6) If any person—
  - (a) duly summoned as a juror at an inquest makes, or causes or permits to be made on his behalf, any false representation to the coroner or the appropriate officer with the intention of evading service as such juror; or
  - (b) makes or causes to be made on behalf of another person who has been so summoned any false representation to the coroner or the appropriate officer with the intention of enabling that other person to evade such service,
 he shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 3 on the standard scale.
- (7) A coroner may authorise a person to perform the functions conferred on the appropriate officer by subsection (4) above and references in this section to the appropriate officer shall be construed as references to the person so authorised.

## 10 Attendance of jurors and witnesses

- (1) Where a person duly summoned as a juror at an inquest—
  - (a) does not, after being openly called three times, appear to the summons; or



- (b) appears to the summons but refuses without reasonable excuse to serve as a juror, the coroner may impose on that person a fine not exceeding £400.
- (2) Where a person duly summoned to give evidence at an inquest—
- (a) does not, after being openly called three times, appear to the summons; or
- (b) appears to the summons but refuses without lawful excuse to answer a question put to him,
- the coroner may impose on that person a fine not exceeding £400.
- (3) The powers conferred upon a coroner by this section shall be in addition to and not in derogation of any other power which the coroner may possess—
- (a) for compelling any person to appear and give evidence before him in any inquest or other proceeding; or
- (b) for punishing any person for contempt of court in not so appearing and giving evidence; but a person shall not be fined by the coroner under this section and also be punished under any such other power.
- (4) Notwithstanding anything in the foregoing provisions of this section, a juror shall not be liable to any penalty for non-attendance on a coroner's jury unless the summons requiring him to attend was duly served on him no later than six days before the day on which he was required to attend.

## 11 Proceedings at inquest

- (1) It shall not be obligatory for a coroner holding an inquest into a death to view the body; and the validity of such an inquest shall not be questioned in any court on the ground that the coroner did not view the body.
- (2) The coroner shall, at the first sitting of the inquest, examine on oath concerning the death all persons who tender evidence as to the facts of the death and all persons having knowledge of those facts whom he considers it expedient to examine.
- (3) In the case of an inquest held with a jury, the jury shall, after hearing the evidence—
- (a) give their verdict and certify it by an inquisition; and
- (b) inquire of and find the particulars for the time being required by the [1953 c. 20.] Births and Deaths Registration Act 1953 (in this Act referred to as "the 1953 Act") to be registered concerning the death.
- (4) In the case of an inquest held without a jury, the coroner shall, after hearing the evidence—
- (a) give his verdict and certify it by an inquisition; and
- (b) inquire of and find the particulars for the time being required by the 1953 Act to be registered concerning the death.
- (5) An inquisition—
- (a) shall be in writing under the hand of the coroner and, in the case of an inquest held with a jury, under the hands of the jurors who concur in the verdict;
- (b) shall set out, so far as such particulars have been proved—
- (i) who the deceased was; and
- (ii) how, when and where the deceased came by his death; and
- (c) shall be in such form as the Lord Chancellor may by rules made by statutory instrument from time to time prescribe.
- (6) At a coroner's inquest into the death of a person who came by his death by murder, manslaughter or infanticide, the purpose of the proceedings shall not include the finding of any person guilty of the murder, manslaughter or infanticide; and accordingly a coroner's inquisition shall in no case charge a person with any of those offences.
- (7) Where an inquest into a death is held, the coroner shall, within five days after the finding of the inquest is given, send to the registrar of deaths a certificate under his hand—
- (a) giving information concerning the death;
- (b) specifying the finding with respect to the particulars which under the 1953 Act are required to be registered concerning the death and with respect to the cause of death; and
- (c) specifying the time and place at which the inquest was held.
- (8) In the case of an inquest into the death of a person who is proved—

- (a) to have been killed on a railway; or
- (b) to have died in consequence of injuries received on a railway,

the coroner shall within seven days after holding the inquest, make a return of the death, including the cause of death, to the Secretary of State in such form as he may require; and in this subsection "railway" has the same meaning as in the [1842 c. 55.] Railway Regulation Act 1842.

## 12 Failure of jury to agree

- (1) This section applies where, in the case of an inquest held with a jury, the jury fails to agree on a verdict.
- (2) If the minority consists of not more than two, the coroner may accept the verdict of the majority, and the majority shall, in that case, certify the verdict under section 11(3) above.
- (3) In any other case of disagreement the coroner may discharge the jury and issue a warrant for summoning another jury and, in that case, the inquest shall proceed in all respects as if the proceedings which terminated in the disagreement had not taken place.

### *Inquests: special cases*

## 13 Order to hold inquest

- (1) This section applies where, on an application by or under the authority of the Attorney-General, the High Court is satisfied as respects a coroner ("the coroner concerned") either—
  - (a) that he refuses or neglects to hold an inquest which ought to be held; or
  - (b) where an inquest has been held by him, that (whether by reason of fraud, rejection of evidence, irregularity of proceedings, insufficiency of inquiry, the discovery of new facts or evidence or otherwise) it is necessary or desirable in the interests of justice that another inquest should be held.
- (2) The High Court may—
  - (a) order an inquest or, as the case may be, another inquest to be held into the death either—
    - (i) by the coroner concerned; or
    - (ii) by the coroner for another district in the same administrative area;
  - (b) order the coroner concerned to pay such costs of and incidental to the application as to the court may appear just; and
  - (c) where an inquest has been held, quash the inquisition on that inquest.
- (3) In relation to an inquest held under subsection (2)(a)(ii) above, the coroner by whom it is held shall be treated for the purposes of this Act as if he were the coroner for the district of the coroner concerned.

## 14 Inquest out of jurisdiction

- (1) If it appears to a coroner that, in the case of a body lying within his district, an inquest ought to be held into the death but it is expedient that the inquest should be held by some other coroner, he may request that coroner to assume jurisdiction to hold the inquest; and if that coroner agrees he, and not the coroner within whose district the body is lying, shall have jurisdiction to hold the inquest.
- (2) If the coroner who has been requested to assume jurisdiction declines to assume it, the coroner who has made the request may apply to the Secretary of State for a direction designating the coroner who is to hold the inquest.
- (3) On the making of an application under subsection (2) above, the Secretary of State—
  - (a) shall determine by which coroner (whether one of the two mentioned in that subsection or another) the inquest should in all the circumstances be held; and
  - (b) shall direct him to assume jurisdiction or, as the case may be, to exercise his jurisdiction to hold the inquest;

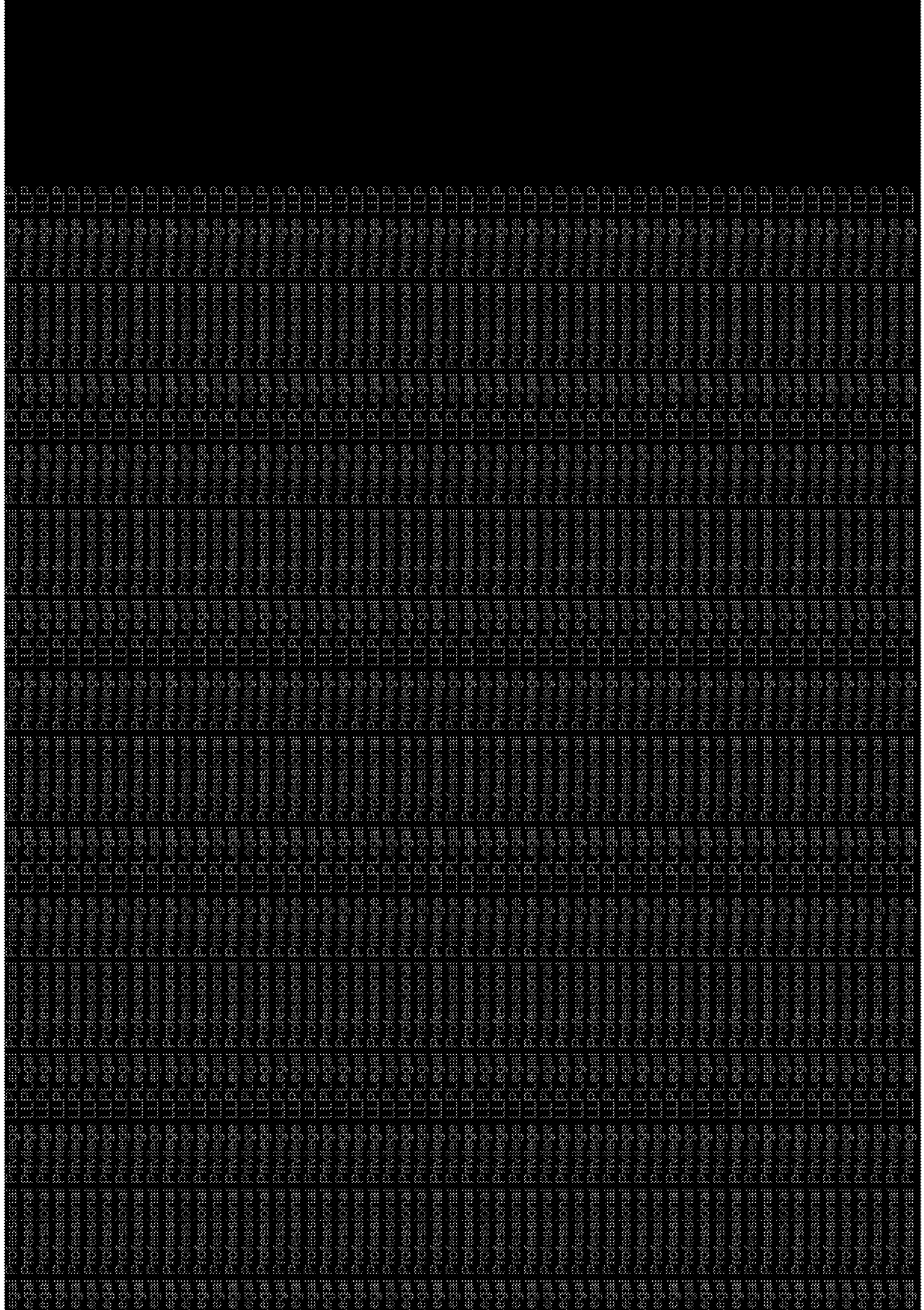
and where a direction is given under this subsection directing a coroner to assume jurisdiction, he, and not the coroner within whose district the body is lying, shall have jurisdiction to hold the inquest and shall hold it accordingly.

- (4) Where jurisdiction to hold an inquest is assumed under this section, it shall not be necessary to remove the body into the district of the coroner who is to hold the inquest.



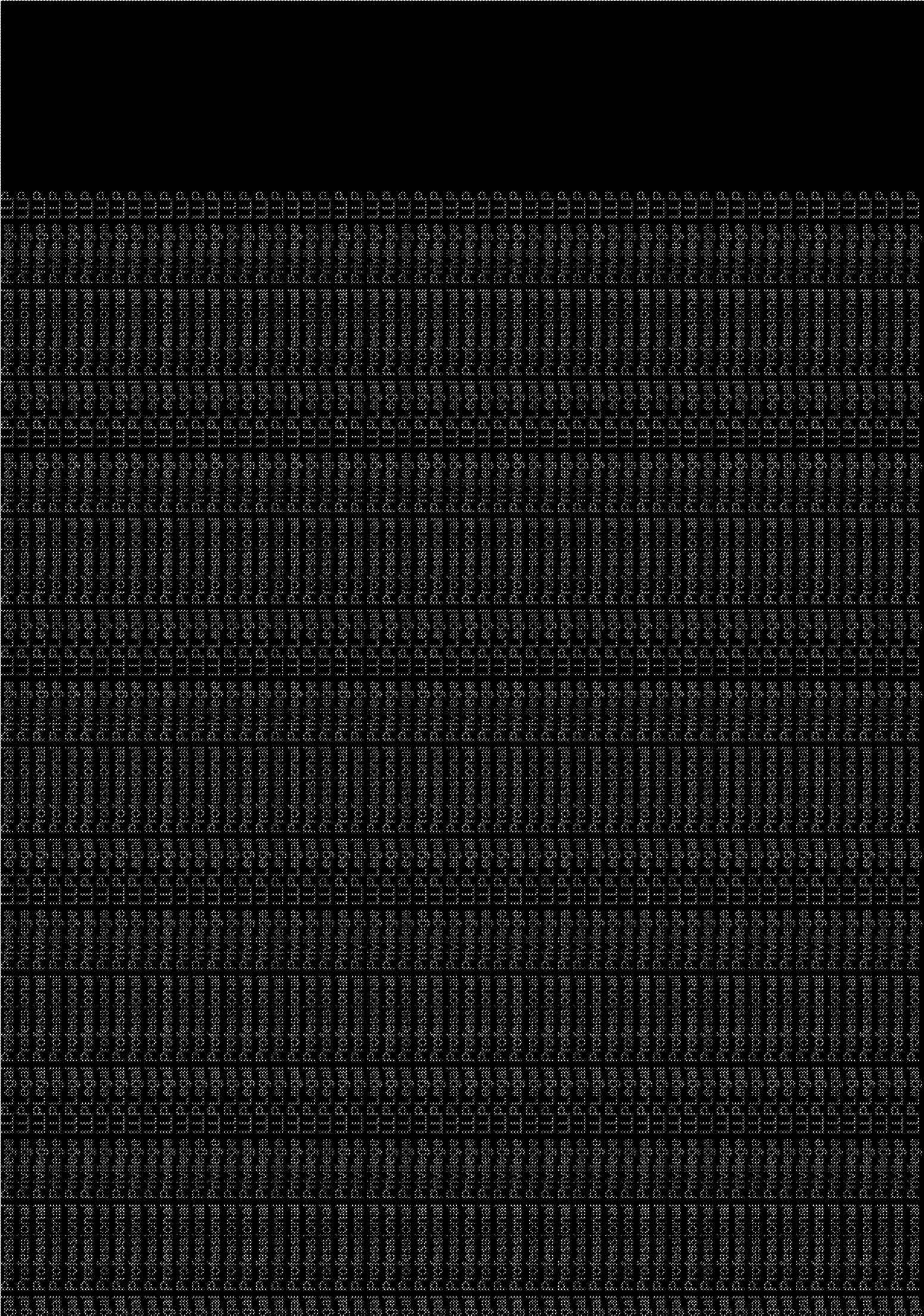
















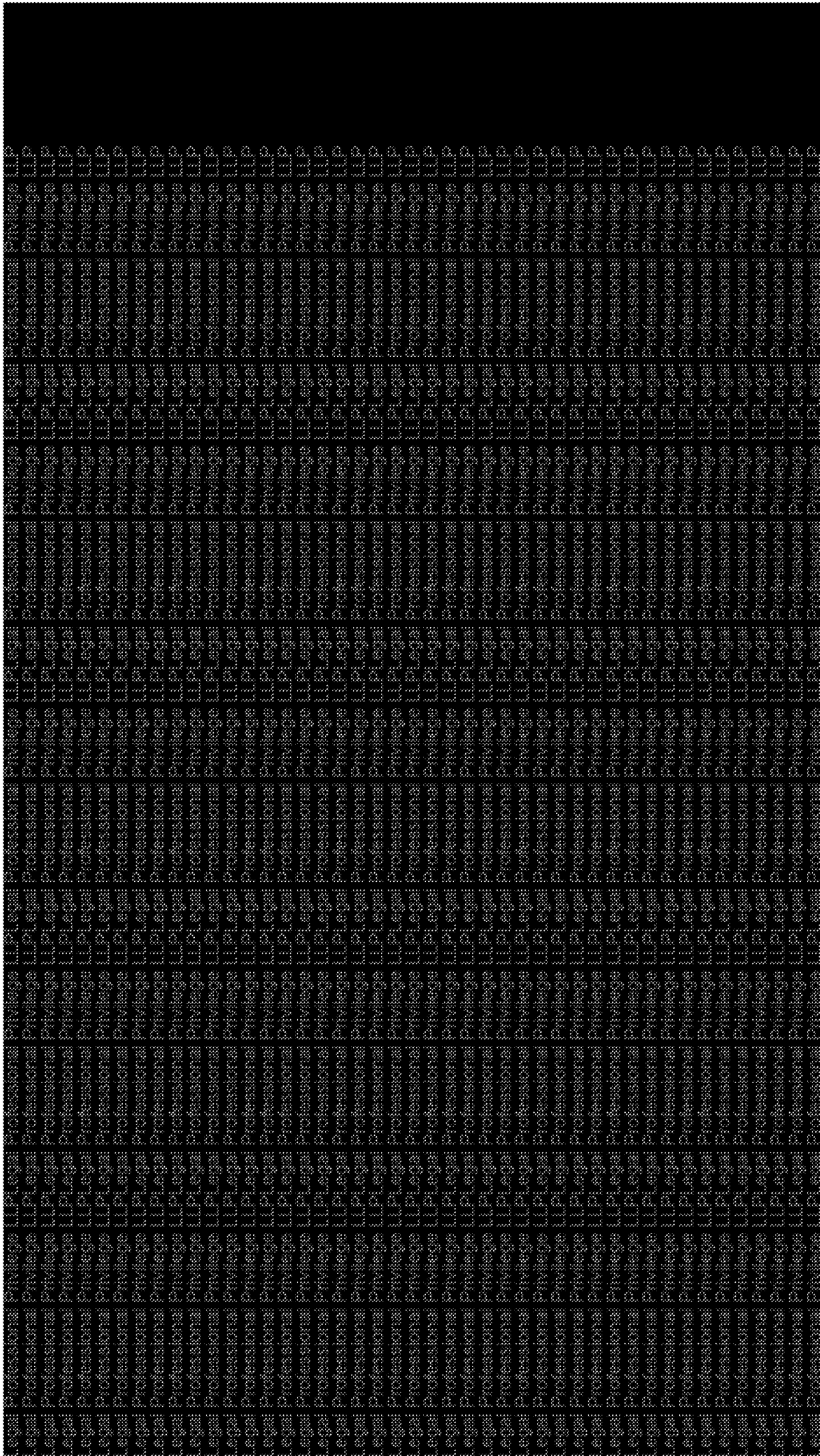










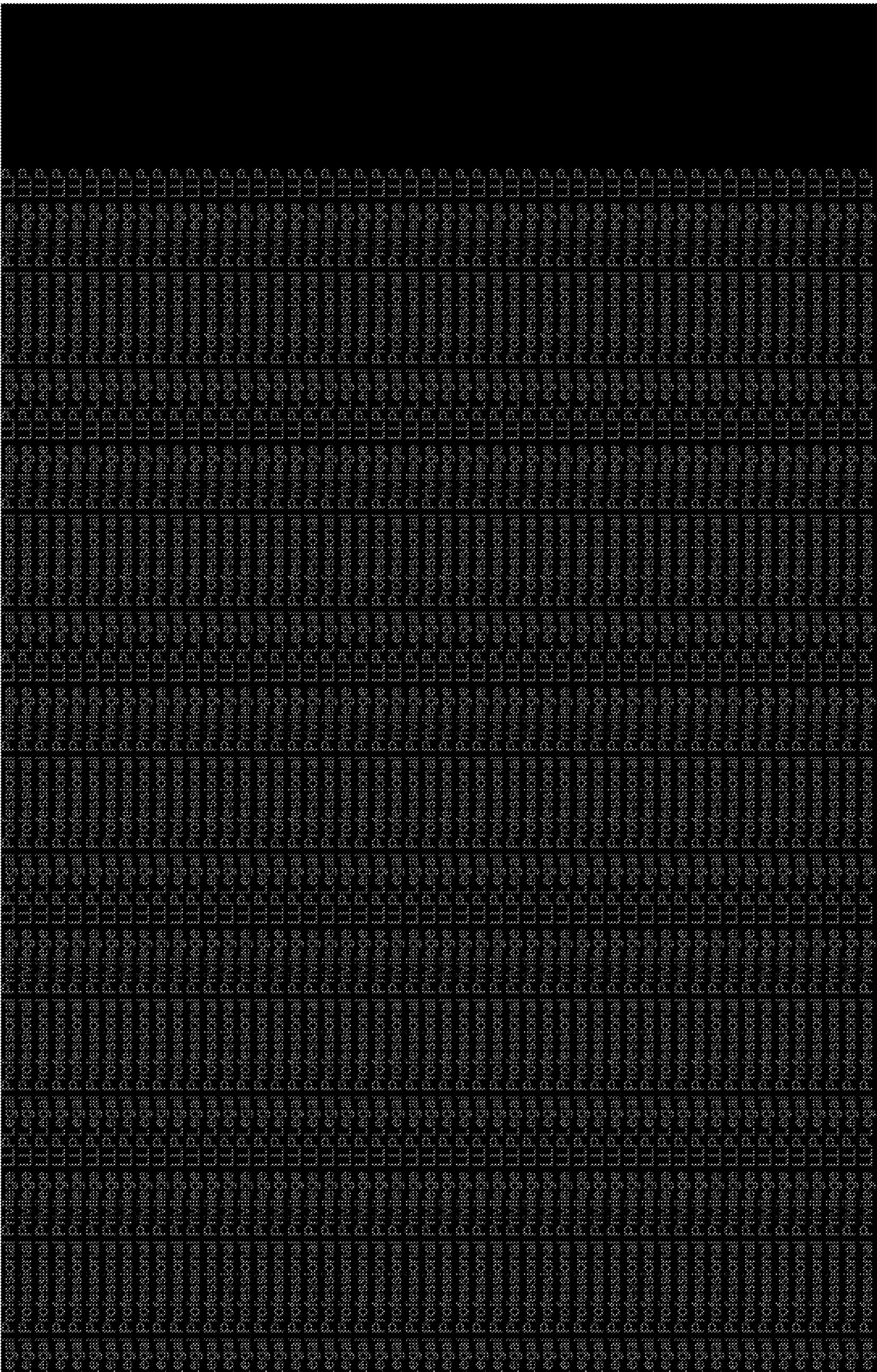


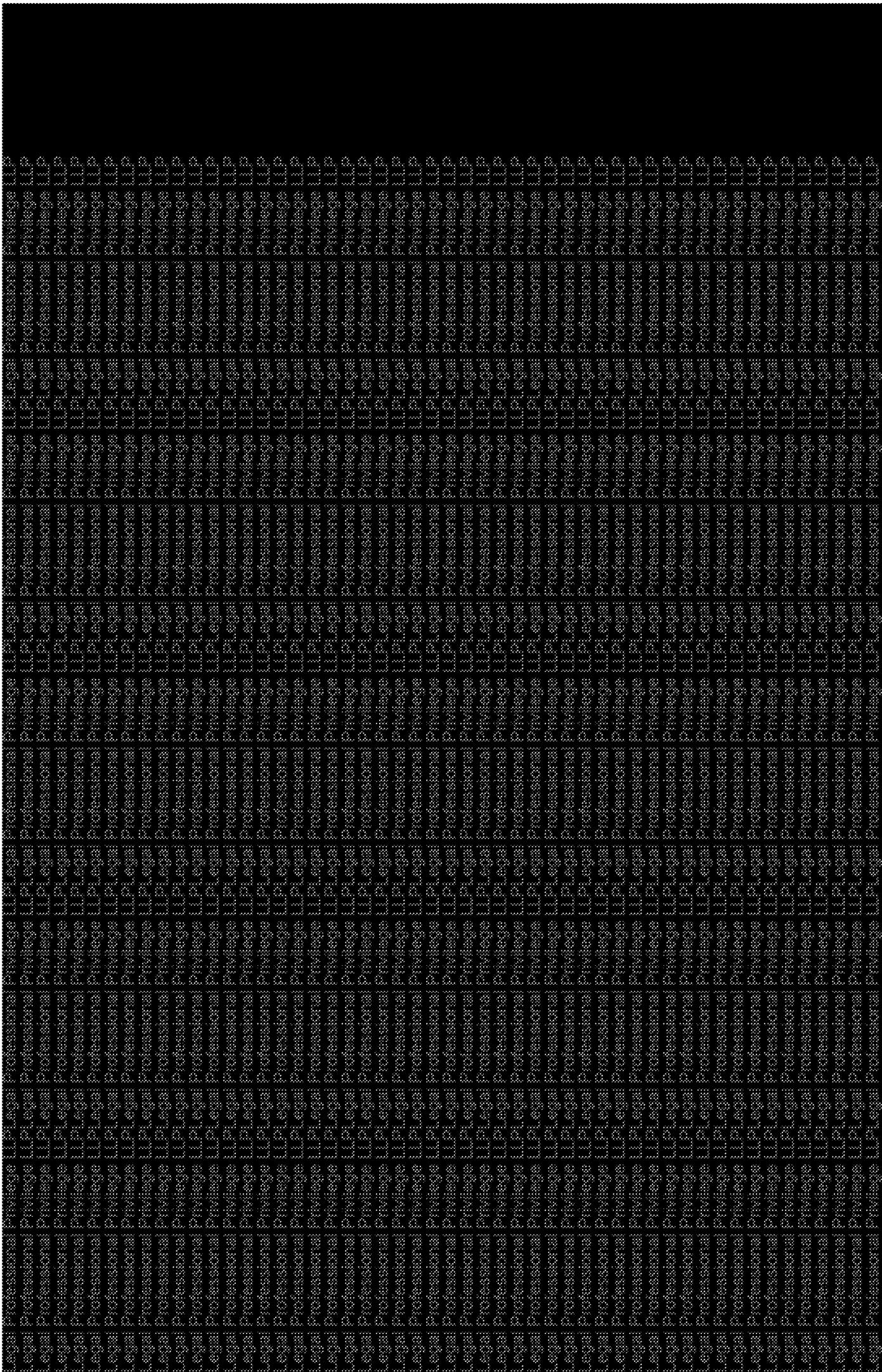
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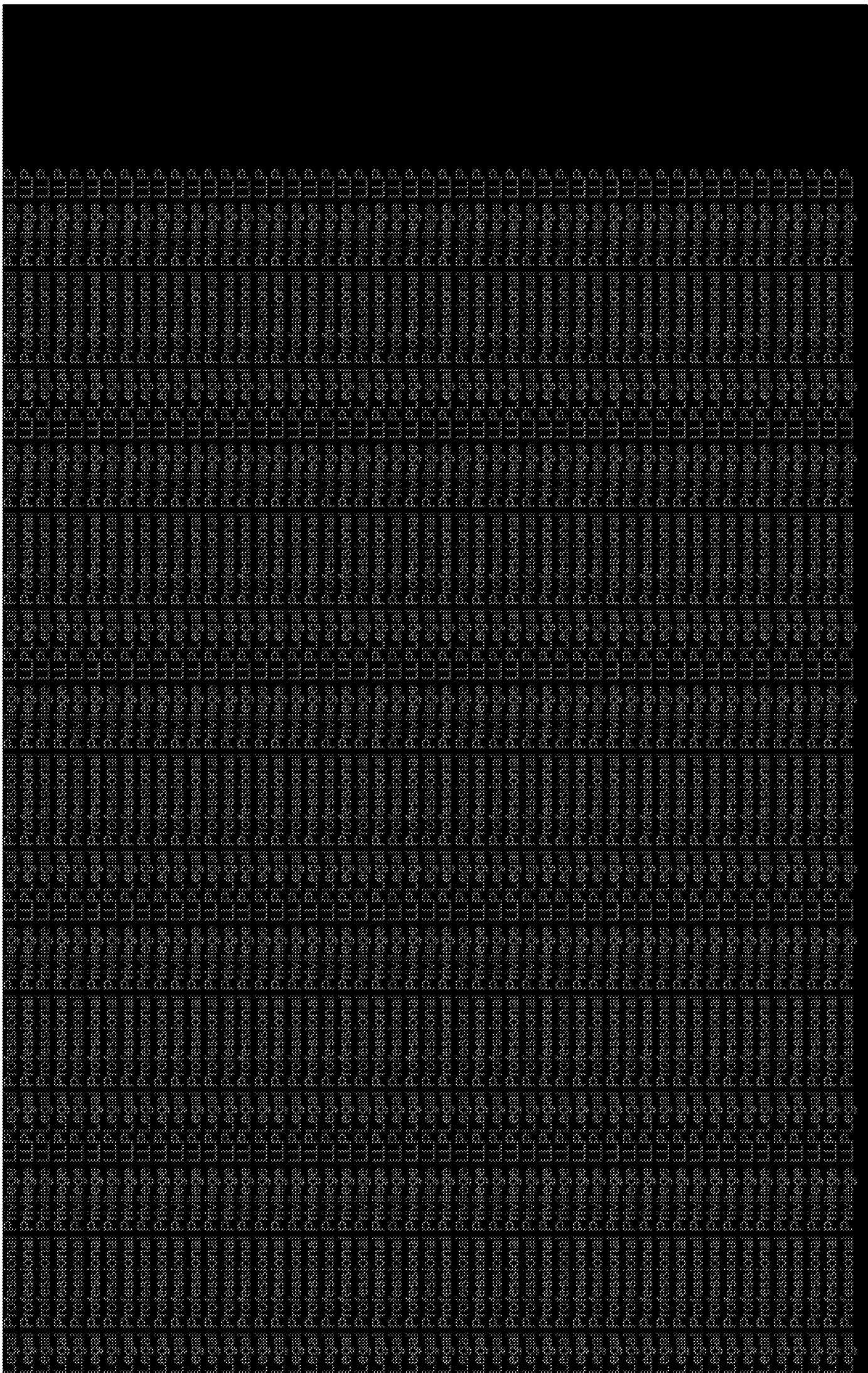




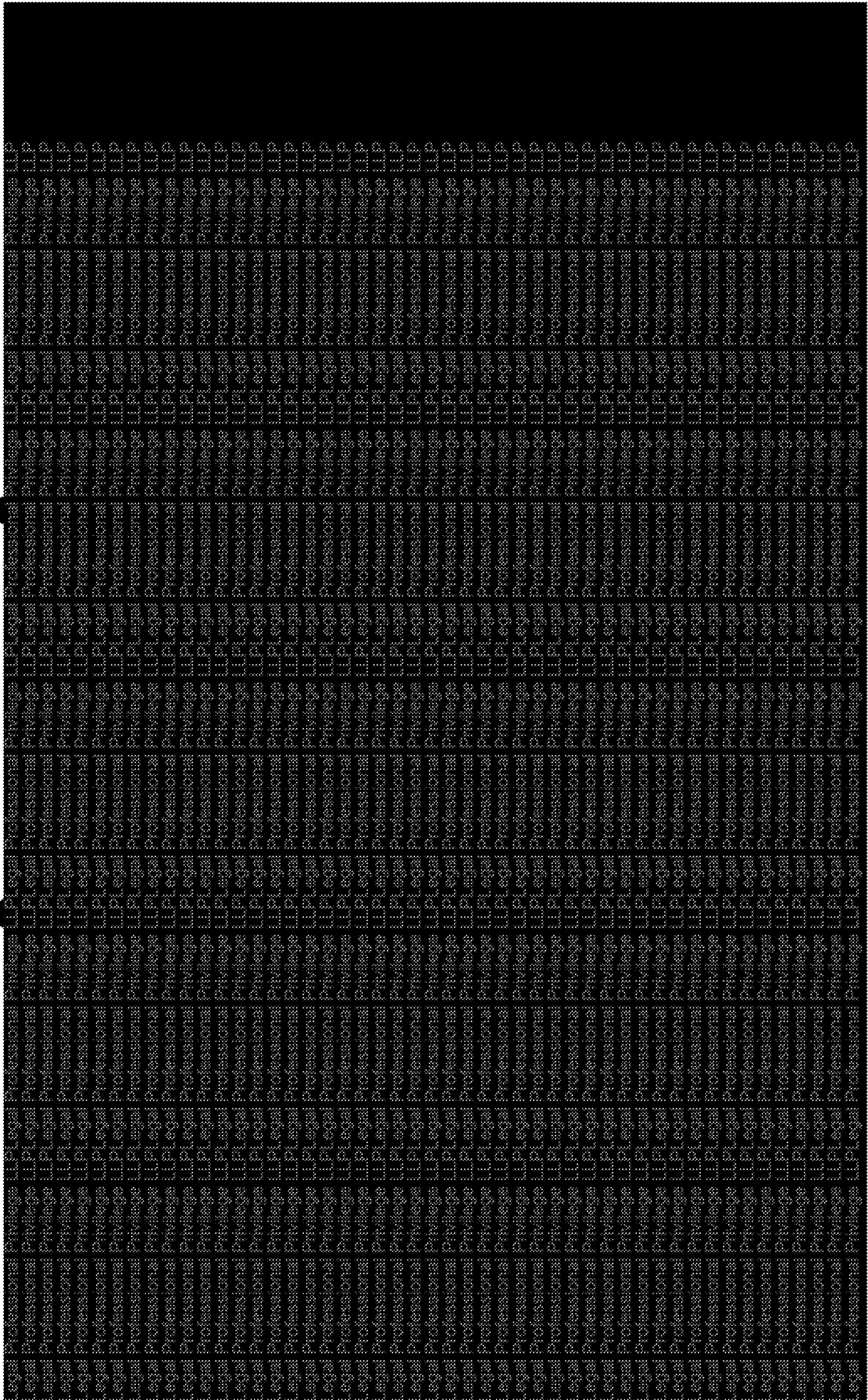






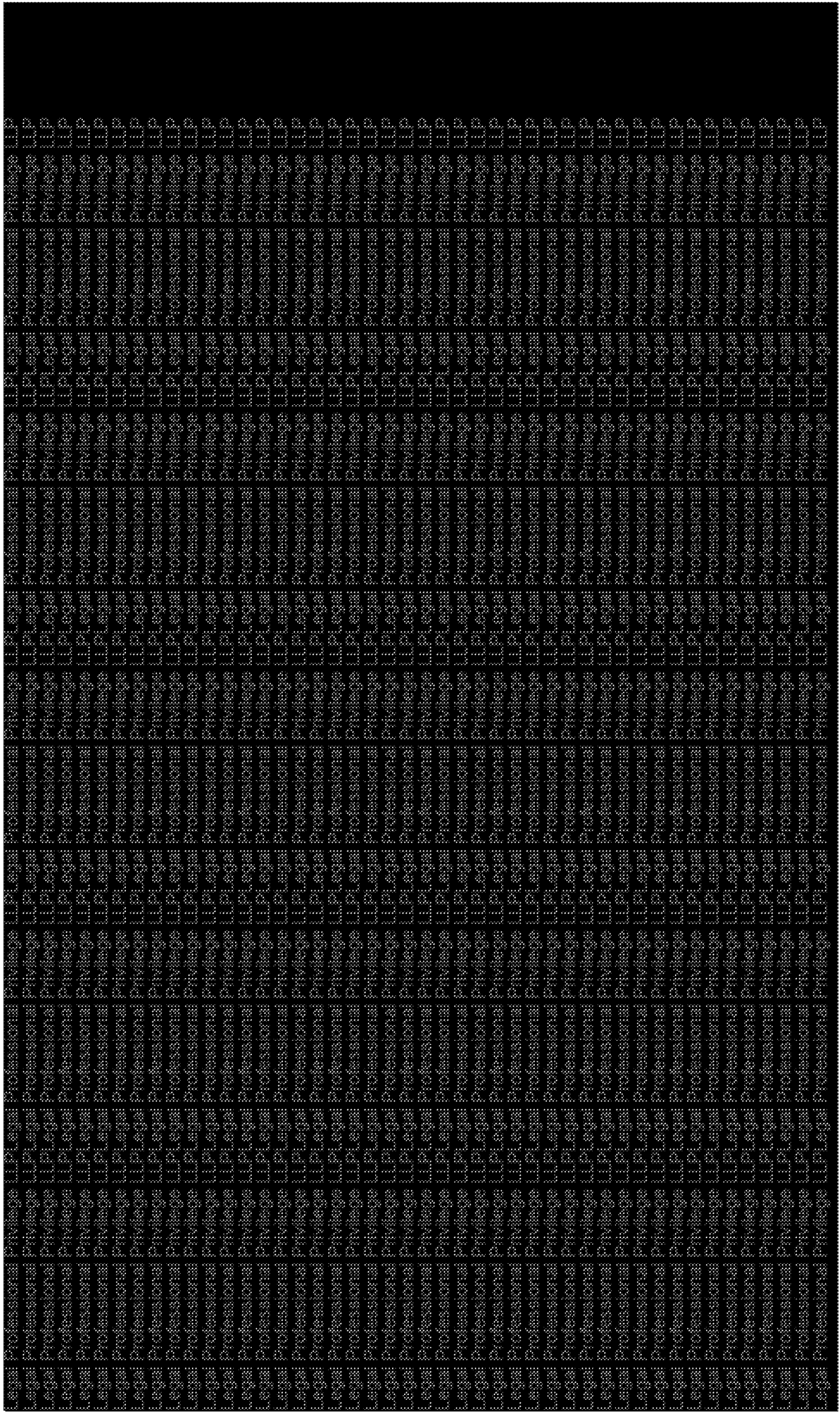




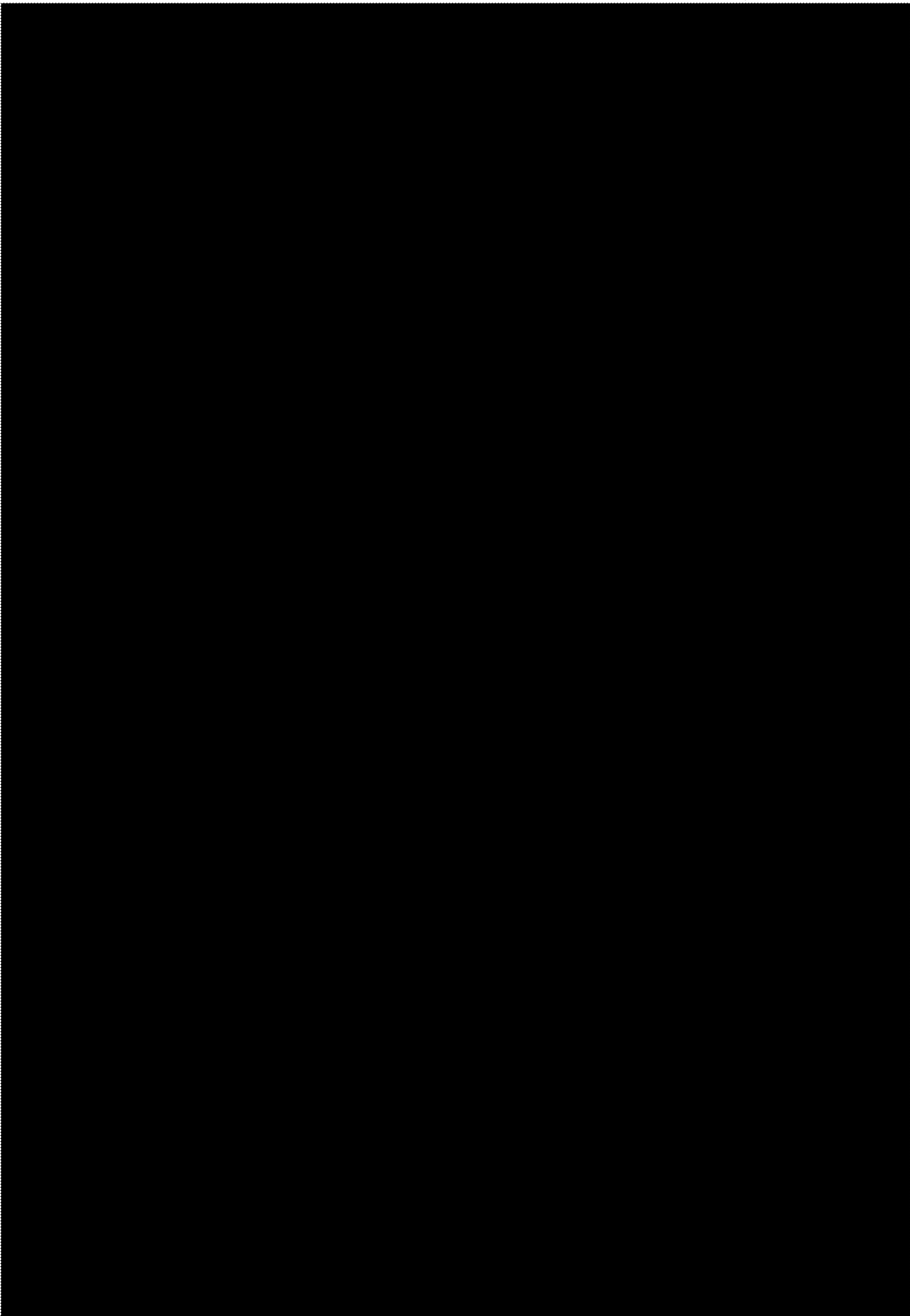


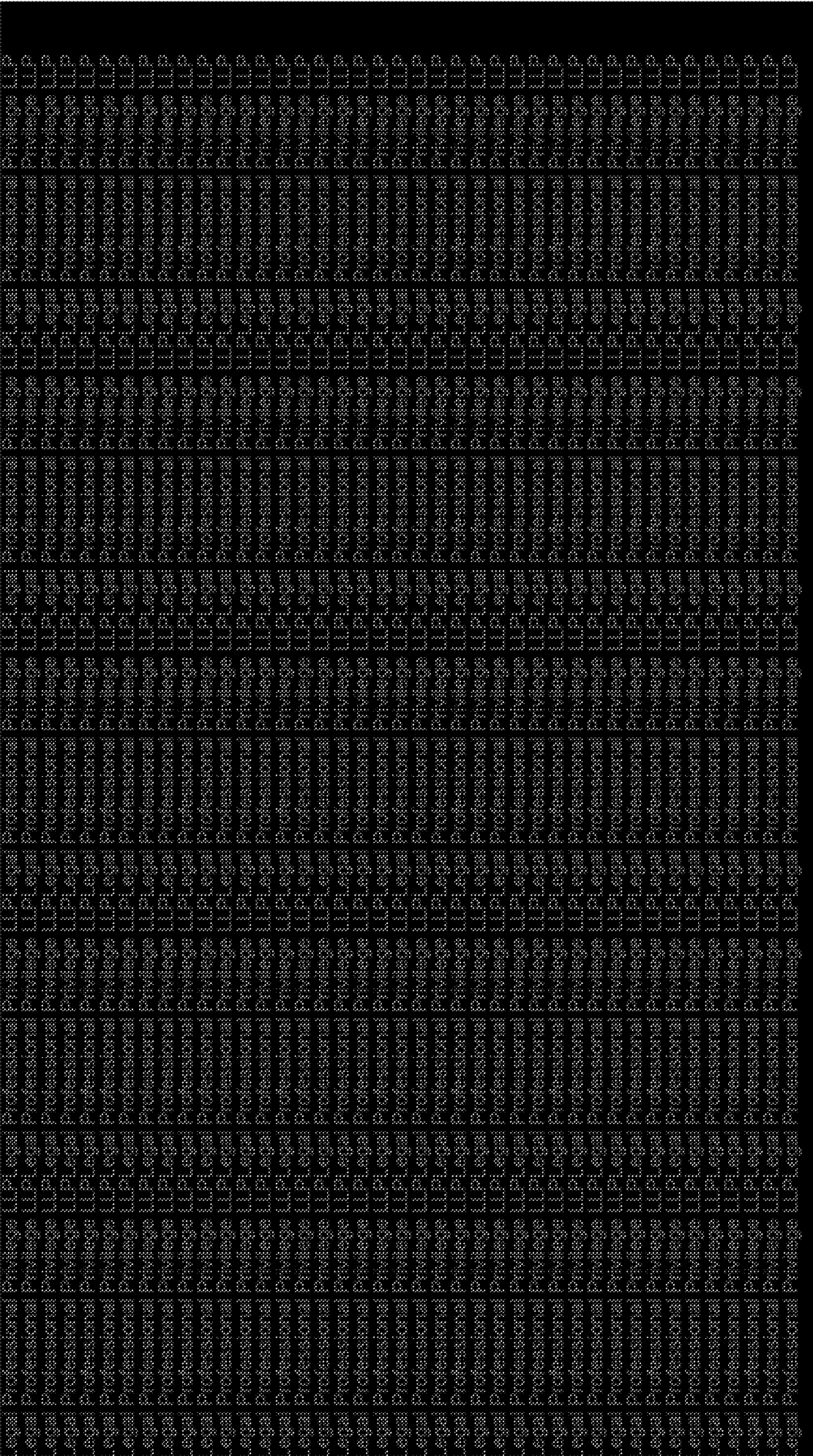
































































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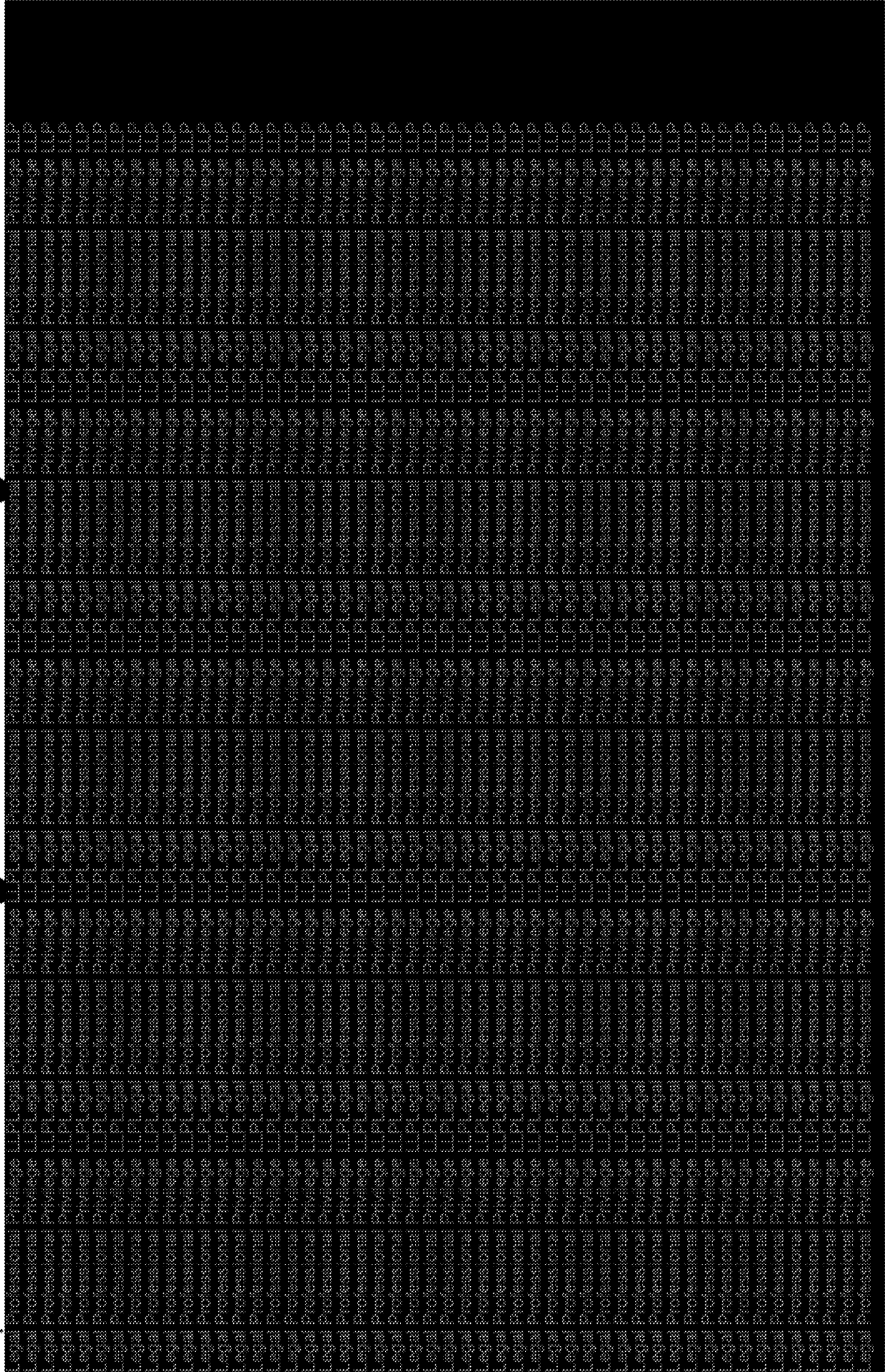




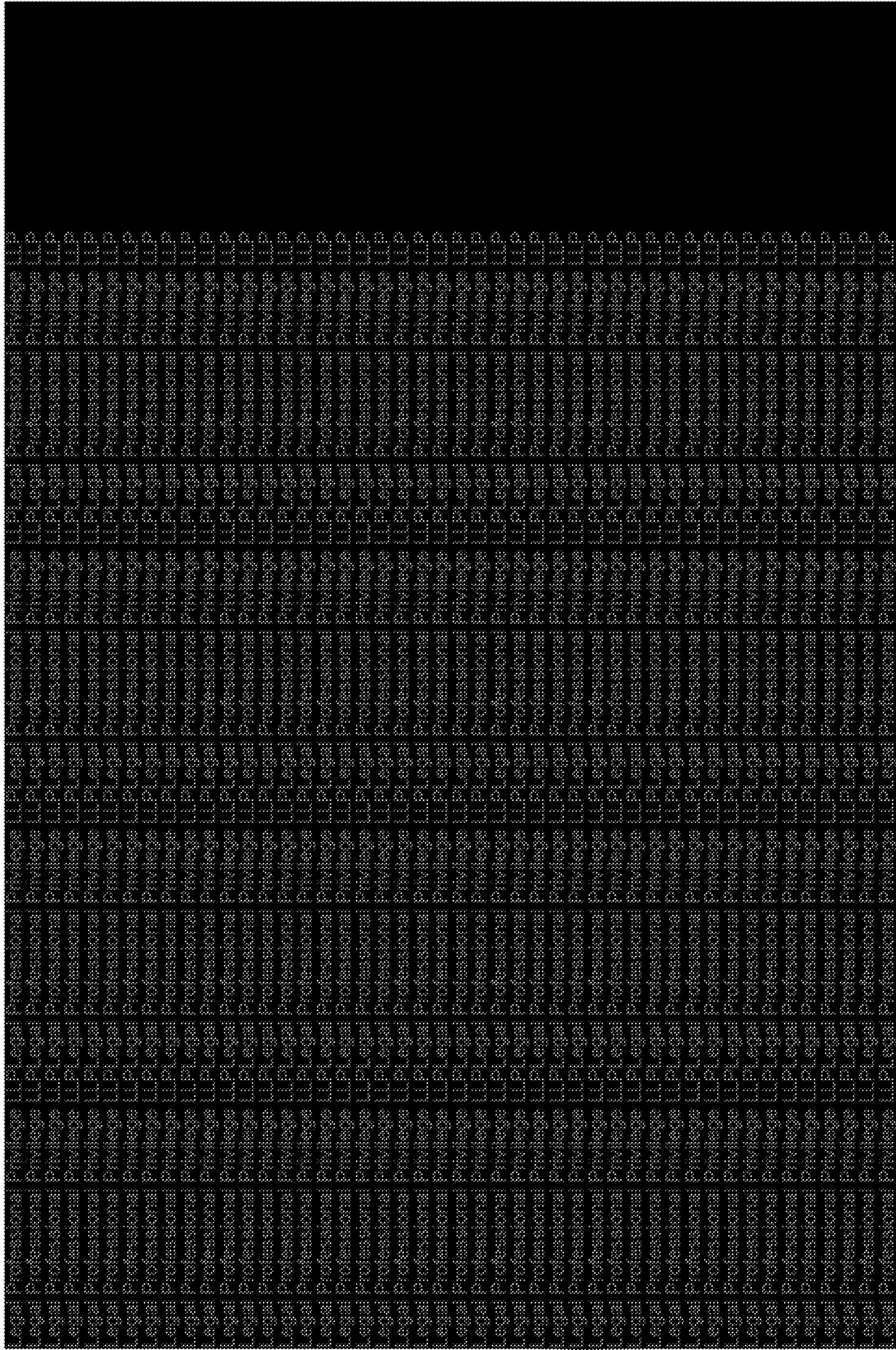






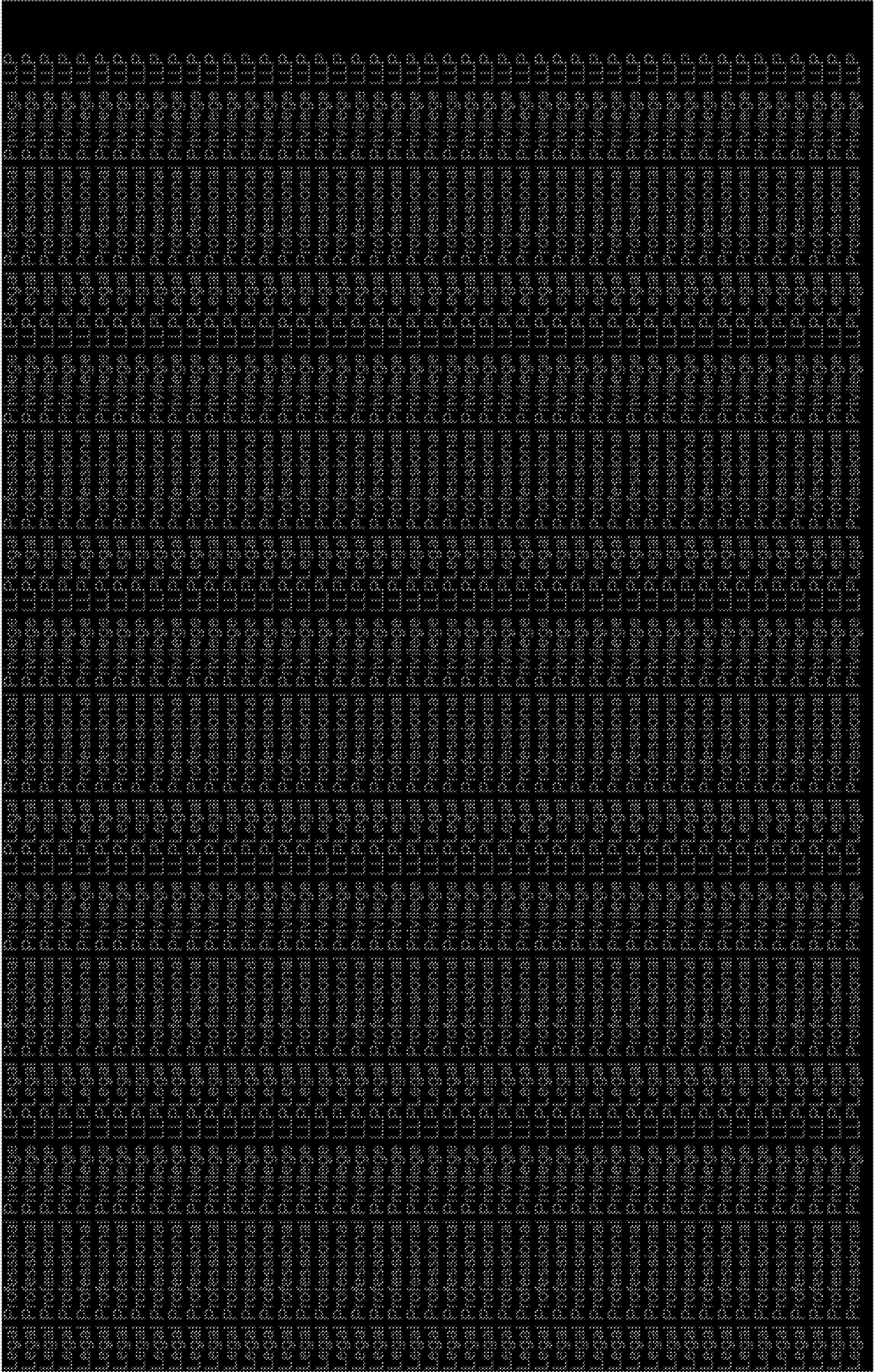


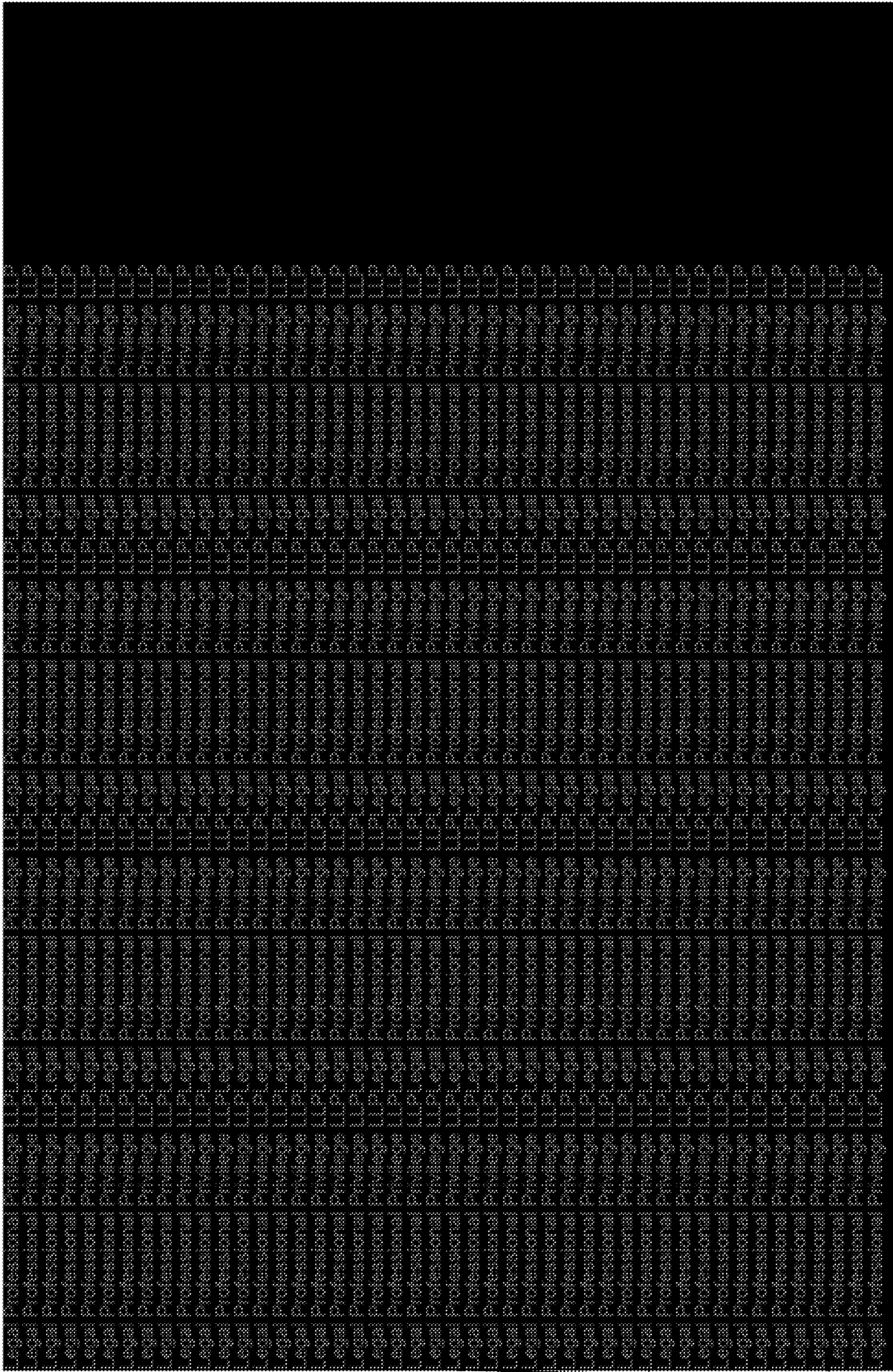


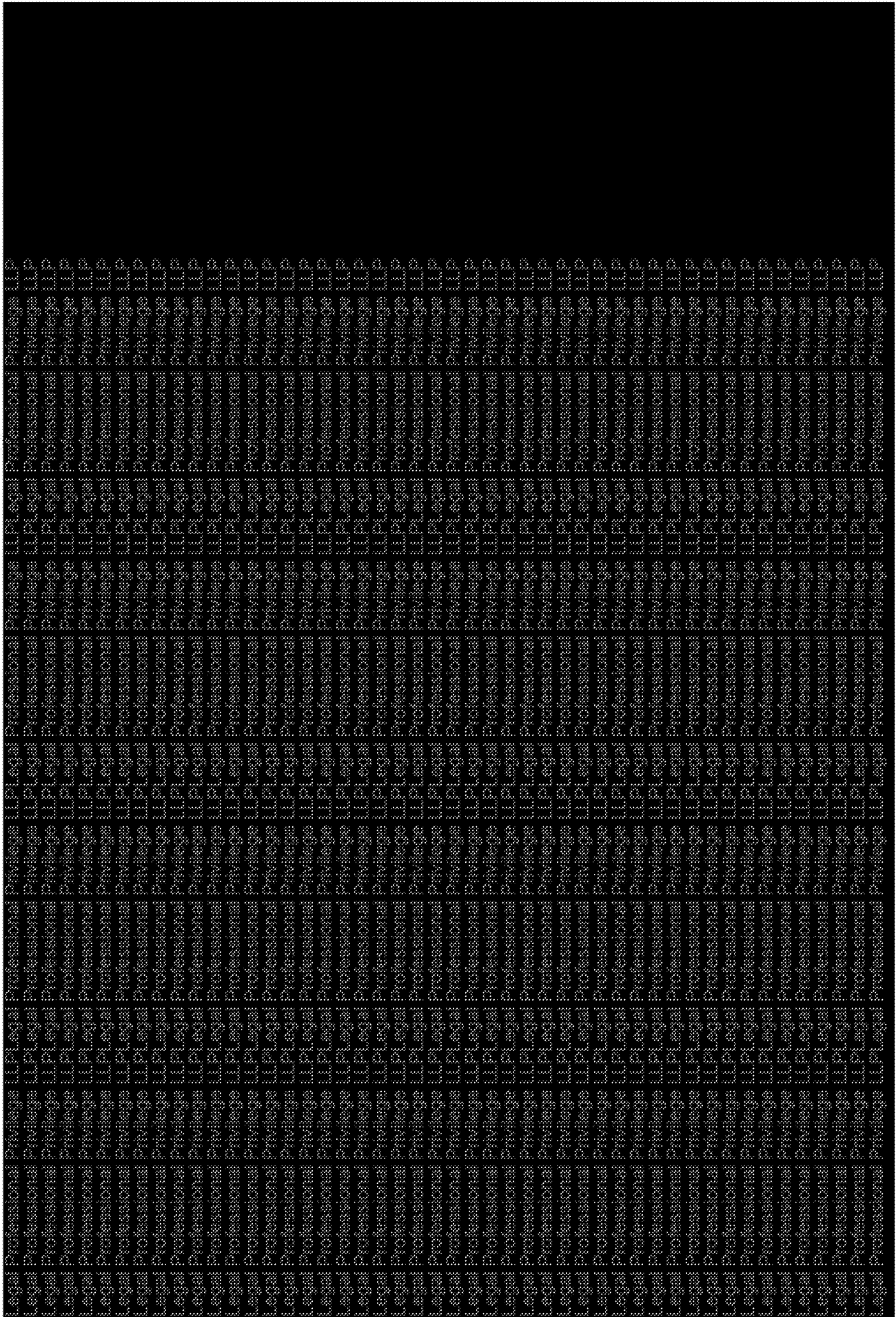


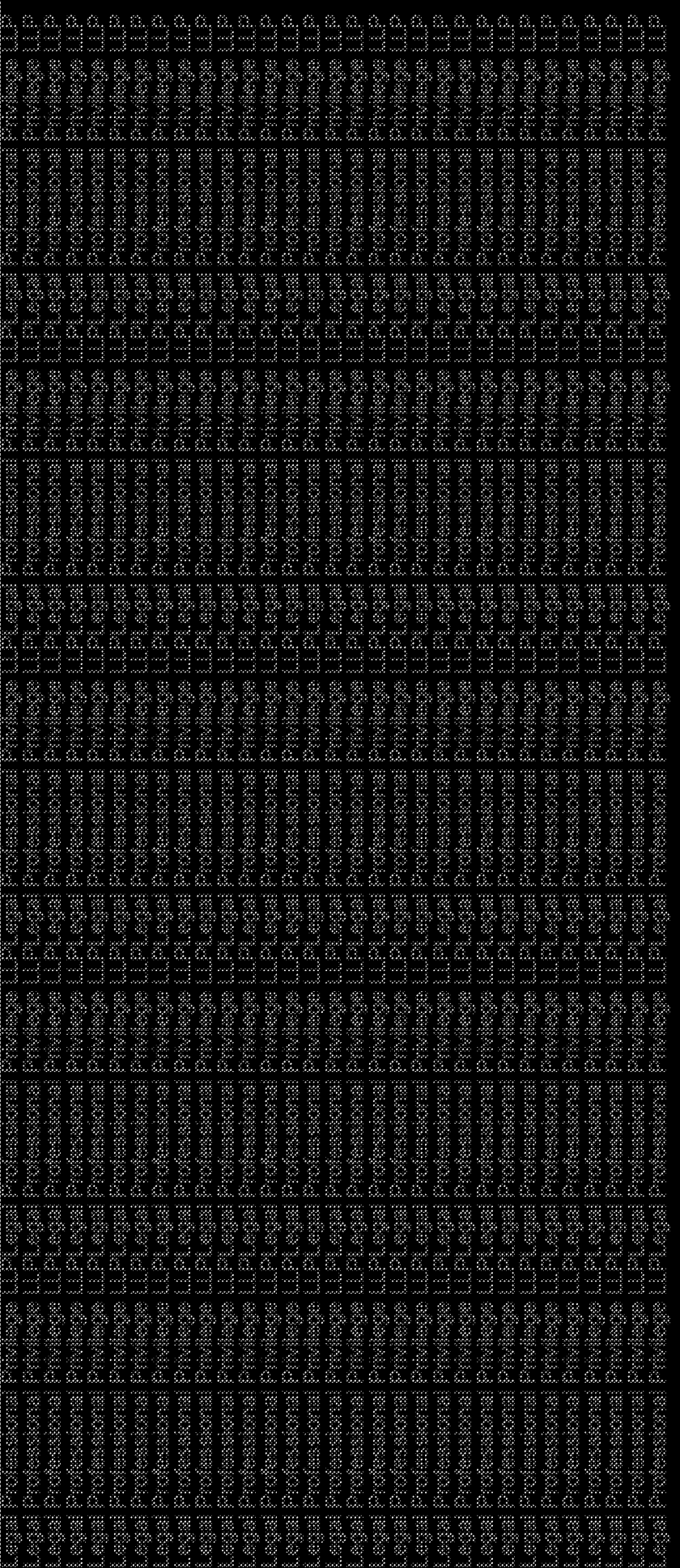


















# Metoclopramide

From Wikipedia, the free encyclopedia

**Metoclopramide** (INN) (pronounced /ˌmɛtəˈkloʊprəmaɪd/ or /ˌmɛtəˈkloʊpɹəmaɪd) is a potent dopamine receptor antagonist used for its antiemetic and prokinetic properties. Thus it is primarily used to treat nausea and vomiting, and to facilitate gastric emptying in patients with gastric stasis.

It is available under various trade names including: **Maxolon** (Shire/Valeant), **Reglan** (Wyeth), **Degan** (Lek), Maxeran (Sanofi Aventis), Primperan (Sanofi Aventis), and Pylomid (Bosnalijek). It was protected under U.S. patent 3177252 until 6 April 1982.

## Contents

- 1 Mode of action
- 2 Clinical use
  - 2.1 Antiemetic use
  - 2.2 Prokinetic use
  - 2.3 Other indications
- 3 Contraindications/precautions
- 4 Adverse effects
- 5 References
- 6 Further reading

## Mode of action

Metoclopramide was first described by Dr. Louis Justin-Besançon and C. Laville in 1964.<sup>[1]</sup> It appears to bind to dopamine D2 receptors where it is a receptor antagonist, and is also a mixed 5-HT<sub>3</sub> receptor antagonist/5-HT<sub>4</sub> receptor agonist.

The anti-emetic action of metoclopramide is due to its antagonist activity at D2 receptors in the chemoreceptor trigger zone (CTZ) in the central nervous system (CNS)—this action prevents nausea and vomiting triggered by most stimuli.<sup>[2]</sup> At higher doses, 5-HT<sub>3</sub> antagonist activity may also contribute to the anti-emetic effect.

The prokinetic activity of metoclopramide is mediated by muscarinic activity, D2 receptor antagonist activity and 5-HT<sub>4</sub> receptor agonist activity.<sup>[3][4]</sup> The prokinetic itself may also contribute to the anti-emetic effect.

## Clinical use

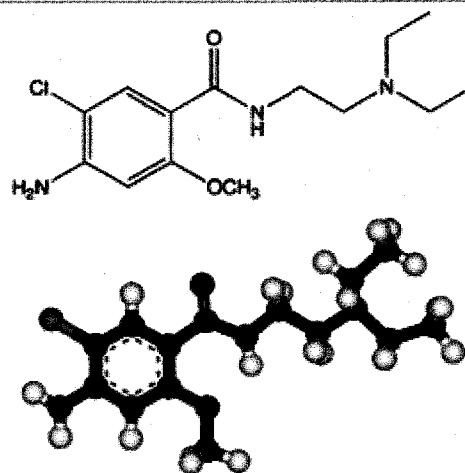
### Antiemetic use

Metoclopramide is commonly used to treat nausea and vomiting (emesis) associated with conditions including: emetogenic drugs, uraemia, radiation sickness, malignancy, labor, and infection.<sup>[5][6]</sup> It is also used by itself or in combination with paracetamol (acetaminophen) for the relief of migraine.

It is considered ineffective in postoperative nausea and vomiting (PONV) at standard doses, and ineffective for motion sickness.<sup>[5][6]</sup> In nausea and vomiting associated with cancer chemotherapy, it has been superseded by the more effective 5-HT<sub>3</sub> antagonists (e.g. ondansetron).

### Prokinetic use

Metoclopramide increases peristalsis of the jejunum and duodenum, increases tone and amplitude of gastric contractions, and relaxes the pyloric sphincter and duodenal bulb. These prokinetic effects make metoclopramide useful in the treatment of gastric stasis (e.g. after gastric surgery or diabetic gastroparesis), as an aid in gastrointestinal radiology by increasing transit in barium studies, and as an aid in difficult small



Metoclopramide

### Systematic (IUPAC) name

4-amino-5-chloro-*N*-(2-(diethylamino)ethyl)-2-methoxybenzamide

### Identifiers

CAS number	364-62-5 ( <a href="http://www.nlm.nih.gov/cgi/mesh/2006/MB.cgi?term=364-62-5&amp;rn=1">http://www.nlm.nih.gov/cgi/mesh/2006/MB.cgi?term=364-62-5&amp;rn=1</a> )
ATC code	A03FA01 ( <a href="http://www.whooc.no/atcddd/indexdatabase/index.php?query=A03FA01">http://www.whooc.no/atcddd/indexdatabase/index.php?query=A03FA01</a> )
PubChem	4168 ( <a href="http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=4168">http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=4168</a> )
DrugBank	APRD00665 ( <a href="http://redpoll.pharmacy.ualberta.ca/drugbank/cgi-bin/getCard.cgi?CARD=APRD00665">http://redpoll.pharmacy.ualberta.ca/drugbank/cgi-bin/getCard.cgi?CARD=APRD00665</a> )

### Chemical data

Formula	C <sub>14</sub> H <sub>22</sub> ClN <sub>3</sub> O <sub>2</sub>
Mol. mass	299.80 g/mol

### Pharmacokinetic data

Bioavailability	80±15% (oral)
Metabolism	Hepatic
Half life	5–6 hours
Excretion	70–85% renal, 2% faecal

### Therapeutic considerations

Pregnancy cat.	A (Au), B (U.S.)
Legal status	S3/S4 (Au), POM (UK), □-only (U.S.)
Routes	Oral, IV, IM

## Metoclopramide - Wikipedia, the free encyclopedia

intestinal intubation. It is also used in gastroesophageal reflux disease (GERD/GORD).

### Other indications

By inhibiting the action of prolactin inhibiting hormone (i.e. dopamine), metoclopramide has sometimes been used to stimulate lactation.

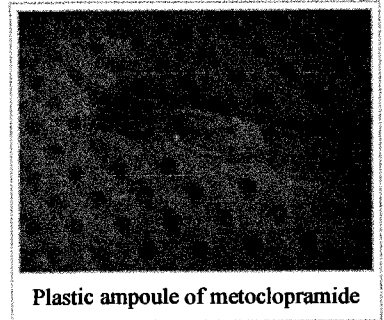
### Contraindications/precautions

Metoclopramide is contraindicated in phaeochromocytoma. It should be used with caution in Parkinson's disease since, as a dopamine antagonist, it may worsen symptoms. Long-term use should be avoided in patients with clinical depression as it may worsen mental state.<sup>[6]</sup> Also contraindicated with a suspected bowel obstruction.

### Adverse effects

Common adverse drug reactions (ADRs) associated with metoclopramide therapy include: restlessness, drowsiness, dizziness, lassitude, and/or dystonic reactions. Infrequent ADRs include: headache, extrapyramidal effects (EPSE) such as oculogyric crisis, hypertension, hypotension, hyperprolactinaemia leading to galactorrhoea, diarrhoea, constipation, and/or depression. Rare but serious ADRs associated with metoclopramide therapy include: agranulocytosis, supraventricular tachycardia, hyperaldosteronism, neuroleptic malignant syndrome and/or tardive dyskinesia.<sup>[6]</sup>

The risk of EPSEs are increased in young adults (<20 years) and children.<sup>[6]</sup> Such dystonic reactions are usually treated with benzotropine or procyclidine. The risk of tardive dyskinesia and EPSE is increased with high dose therapy and with prolonged use. Tardive dyskinesias may be persistent and irreversible in some patients.<sup>[5]</sup>



Plastic ampoule of metoclopramide

### References

- <sup>1</sup> ^ Justin-Besançon L, Laville C. Action antiémétique du métoclopramide vis-à-vis de l'apomorphine et de l'hydergine [Antiemetic action of metoclopramide with respect to apomorphine and hydergine]. *C R Seances Soc Biol Fil* 1964;158:723-7. PMID 14186927 ([http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=14186927](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=14186927)).
- <sup>2</sup> ^ Rang HP, Dale MM, Ritter JM, Moore PK. *Pharmacology*. 5th ed. Edinburgh: Churchill Livingstone; 2003. ISBN 0-443-07145-4
- <sup>3</sup> ^ Sweetman S, editor. *Martindale: The complete drug reference*. 34th ed. London: Pharmaceutical Press; 2004. ISBN 0-85369-550-4
- <sup>4</sup> ^ Tonini M, Candura SM, Messori E, Rizzi CA. Therapeutic potential of drugs with mixed 5-HT<sub>4</sub> agonist/5-HT<sub>3</sub> antagonist action in the control of emesis. *Pharmacol Res* 1995;31(5):257-60. PMID 7479521 ([http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=7479521](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=7479521))
- <sup>5</sup> ^ *a b c* Valeant Pharmaceuticals. Maxolon (Australian Approved Product Information). Auburn (NSW): Valeant Pharmaceuticals Australasia; 2000.
- <sup>6</sup> ^ *a b c d e* Rossi S, editor. *Australian Medicines Handbook 2006*. Adelaide: Australian Medicines Handbook; 2006. ISBN 0-9757919-2-3

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- Canadian Pharmacists Association. *Compendium of Pharmaceuticals and Specialties*. 25th ed. Toronto: Webcom; 2000. ISBN 0-919115-76-4
- *Practical Gastroenterology May 2004 Recognition of Movement Disorders and Extrapyramidal side effects - would you recognize them if you see them?*. Available on [practicalgastro.com](http://practicalgastro.com)

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Categories: Antiemetics | Dopamine antagonists | Motility stimulants

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## Hyoscine hydrobromide



Main Use

Travel sickness

Active Ingredient

Hyoscine Hydrobromide.

Manufacturer

Roche Consumer Health,  
GlaxoSmithKline Consumer  
Healthcare

## How does it work?

This medicine contains the active ingredient hyoscine hydrobromide, which is a type of medicine called an antimuscarinic (or anticholinergic). It is used to prevent travel sickness.

Travel sickness is believed to be a result of the brain receiving conflicting information about what the body senses is happening and what the eyes see is happening.

In the inner ear are three fluid filled canals called the vestibular system. These detect changes in the body's position. Motion sickness is thought to occur when the vestibular system sends messages to the brain telling it that the body is being moved around, while the eyes send messages that the body is stationary.

Hyoscine hydrobromide is thought to prevent motion sickness by stopping the messages sent from the vestibular system from reaching an area of the brain called the vomiting centre. This area of the brain coordinates the vomiting reflex. Hyoscine blocks receptors called muscarinic (or cholinergic) receptors that are found in the vomiting centre. This prevents the vomiting centre from sending nerve messages to the stomach that would normally cause vomiting.

Hyoscine needs to be taken before travel to be most effective, as once feeling sick or vomiting has started it is more difficult to control, particularly with tablets that need to be kept down.

Hyoscine hydrobromide is available in two forms, as tablets that can be bought without a prescription from pharmacies (eg Kwells, Joy-Rides), and as a skin patch that is only available on prescription (Scopoderm TTS).

Hyoscine tablets need to be taken around 30 minutes before travel to be most effective at preventing sickness, and the dose may need to be repeated during long journeys.

Scopoderm TTS needs to be applied to the skin behind the ear 5 to 6 hours before travel, or the night before. It can prevent travel sickness for up to 72 hours, but if it is only needed for a shorter time it should be removed at the end of the journey.

Read the instructions provided with each individual medicine for more detailed information about doses and administration.

## What is it used for?

- Preventing travel sickness

## Warning!

- Different brands or preparations of this medicine may not be recommended for use in children under certain ages. Consult the product information provided with the medicine, or ask your pharmacist for further information.
- Follow the printed instructions you have been given with this medicine.
- This medicine may cause drowsiness, blurred vision and other side effects that may affect your ability to drive. You should not drive or operate machinery if you experience these symptoms. Alcohol should be avoided as it can worsen these side effects.

## Use with caution in

- Decreased kidney function
- Decreased liver function
- Difficulty in passing urine (urinary retention)
- Disease involving the heart and blood vessels (cardiovascular disease)
- Elderly people
- Enlarged prostate gland (prostatic hypertrophy)

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# Hyoscine hydrobromide

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- Life long inherited blood diseases which can cause a variety of symptoms, including mental health problems (porphyrias)
- Obstruction of the stomach or intestines

### Not to be used in

- [Glaucoma](#)

This medicine should not be used if you are allergic to one or any of its ingredients. Please inform your doctor or pharmacist if you have previously experienced such an allergy.

If you feel you have experienced an allergic reaction, stop using this medicine and inform your doctor or pharmacist immediately.

### Pregnancy and Breastfeeding

Certain medicines should not be used during pregnancy or breastfeeding. However, other medicines may be safely used in pregnancy or breastfeeding providing the benefits to the mother outweigh the risks to the unborn baby. Always inform your doctor if you are pregnant or planning a pregnancy, before using any medicine.

- The safety of this medicine in pregnancy has not been established. It should only be used during pregnancy, particularly in the first trimester, if the expected benefit to the mother outweighs any potential risk to the developing foetus. Seek medical advice from your doctor.
- Small amounts of this medicine may pass into breast milk. Seek medical advice from your doctor before breastfeeding while using this medicine.

### Side effects

Medicines and their possible side effects can affect individual people in different ways. The following are some of the side effects that are known to be associated with this medicine. Because a side effect is stated here, it does not mean that all people using this medicine will experience that or any side effect.

- Blurred vision
- Dizziness
- Irritation of skin at patch application site
- Dry mouth
- Drowsiness
- Problems with urinating

The side effects listed above may not include all of the side effects reported by the drug's manufacturer.

For more information about any other possible risks associated with this medicine, please read the information provided with the medicine or consult your doctor or pharmacist.

### How can this medicine affect other medicines?

Tell your doctor or pharmacist what medicines you are taking, including those bought without a prescription and herbal medicines, before you use this medicine. Likewise, always check with your doctor or pharmacist before taking any new medicines during treatment with this one.

If this medicine is taken with other medicines that have antimuscarinic effects there may be an increased risk of side effects such as blurred vision, drowsiness, dry mouth and difficulty urinating. Other medicines with antimuscarinic effects include the following:

- antihistamines, eg promethazine, chlorpheniramine
- antispasmodics, eg atropine, propantheline, oxybutynin
- antimuscarinic medicines for Parkinson's symptoms, eg procyclidine
- antipsychotics, eg chlorpromazine, clozapine, thioridazine
- tricyclic antidepressants, eg amitriptyline.

If you experience a dry mouth as a side effect of this medicine you may find that medicines that are designed to dissolve and be absorbed from under the tongue, eg sublingual glyceryl trinitrate (GTN) tablets, become less effective. This is because the tablets do not dissolve properly in a dry mouth. To resolve this, drink a mouthful of water before taking sublingual tablets.

### Other medicines containing the same active ingredients

[Joy-Rides](#)

[Junior Kwells](#)

[Kwells](#)

[Scopoderm TTS](#)

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by [abelfisher](#)

[Ulnar or Median nerve](#)

Yesterday 23:03

by [abelfisher](#)

[ME or PVFS](#)

Yesterday 22:53

by [kittykat1989](#)

[Constant need to wee](#)

Yesterday 22:11

by [timberspal](#)

## FOCUS

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# Midazolam

From Wikipedia, the free encyclopedia

**Midazolam** (marketed under brand names **Versed**<sup>®</sup>, **Hypnovel**<sup>®</sup>, **Dormicum**<sup>®</sup> and **Dormonid**<sup>®</sup>, pronounced mɪˈdæzələəm) is a drug which is a benzodiazepine derivative. It has powerful anxiolytic, amnestic, hypnotic, anticonvulsant, skeletal muscle relaxant and sedative properties. It is considered a fast-acting benzodiazepine, with a short elimination half-life. It is therefore a very useful drug to use for short minor procedures such as dental extraction.

Midazolam was first synthesized in 1976 by Fryer and Walser.

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## Mechanism of action

Like other benzodiazepines, midazolam acts on benzodiazepine receptors which enhance the binding of GABA to the GABA<sub>A</sub> receptor which results in inhibitory effects on the central nervous system.<sup>[1]</sup>

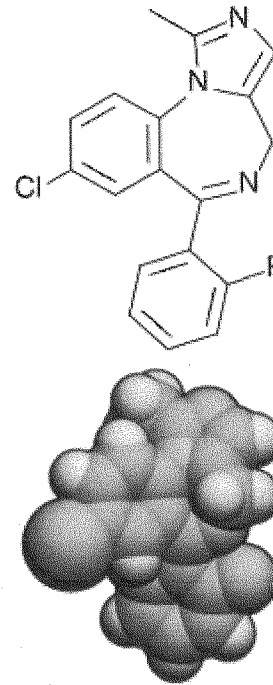
## Indications

Midazolam is indicated for the acute management of aggressive or delirious patients and also is sometimes used for the acute management of seizures such as status epilepticus. Long term use for the management of epilepsy is not recommended however, due to the significant risk of tolerance which renders midazolam and other benzodiazepines ineffective and as well the significant side effect of sedation.<sup>[2]</sup> In mice given chronic midazolam a slowly evolving tolerance developed to the anticonvulsant properties of midazolam over 15 days, although some anticonvulsant effects were still apparent after 15 days of continued administration.<sup>[3]</sup>

Midazolam is occasionally used as a hypnotic, especially in hospitals. Like other benzodiazepines, it produces a decrease in delta activity, though the effect of benzodiazepines on delta may not be mediated via benzodiazepine receptors. Delta activity is an indicator of depth of sleep within non-REM sleep; it is thought to reflect sleep quality, with lower levels of delta sleep reflecting poorer sleep. Thus midazolam and other benzodiazepines cause a deterioration in sleep quality. Cyproheptadine may be superior to nitrazepam in the treatment of insomnia as it enhances sleep quality based on EEG studies.<sup>[4]</sup>

## Interactions

<http://en.wikipedia.org/wiki/Midazolam>



Midazolam

### Systematic (IUPAC) name

8-chloro-6-(2-fluorophenyl)-1-methyl-4H-imidazo[1,5-a][1,4]benzodiazepine

### Identifiers

CAS number	59467-70-8 ( <a href="http://www.nlm.nih.gov/cgi/mesh/2006/MB.cgi?term=59467-70-8&amp;rn=1">http://www.nlm.nih.gov/cgi/mesh/2006/MB.cgi?term=59467-70-8&amp;rn=1</a> )
ATC code	N05CD08 ( <a href="http://www.whooc.no/atcddd/indexdatabase/index.php?query=N05CD08">http://www.whooc.no/atcddd/indexdatabase/index.php?query=N05CD08</a> )
PubChem	4192 ( <a href="http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=4192">http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=4192</a> )
DrugBank	APRD00680 ( <a href="http://redpoll.pharmacy.ualberta.ca/drugbank/cgi-bin/getCard.cgi?CARD=APRD00680">http://redpoll.pharmacy.ualberta.ca/drugbank/cgi-bin/getCard.cgi?CARD=APRD00680</a> )

### Chemical data

Formula	C <sub>18</sub> H <sub>13</sub> ClFN <sub>3</sub>
Mol. mass	325.78

### Pharmacokinetic data

Bioavailability	Oral ~36% I.M. 90%+
Metabolism	Hepatic
Half life	1.8-6.4 hours
Excretion	Renal

### Therapeutic considerations

Pregnancy cat.	D (USA) C (Aus)
Legal status	Schedule IV(US)
Routes	Oral, I.M., I.V., parenteral

Midazolam is metabolized almost completely by cytochrome P450-3A4. Grapefruit juice reduces intestinal 3A4 and results in less metabolism and higher plasma concentrations, which could result in overdose.

## Contraindications

Hypersensitivity, acute narrow angle glaucoma, shock, hypotension, head injury, and drug or alcohol use. Most are relative contraindications.

## Side Effects

Residual 'hangover' effects after nighttime administration of midazolam such as sleepiness, impaired psychomotor and cognitive functions may persist into the next day which may impair the ability of users to drive safely and increase risks of falls and hip fractures.<sup>[5]</sup>

## Pregnancy

Midazolam (as with other central nervous system depressants, if taken regularly in pregnancy, may result in reduced IQ, developmental problems, physical malformations--however this data is inconclusive. Midazolam when taken during the third trimester of pregnancy may cause severe risk to the neonate, including benzodiazepine withdrawal syndrome with possible symptoms including hypotonia, apnoeic spells, cyanosis, and impaired metabolic responses to cold stress. Symptoms of hypotonia and the neonatal benzodiazepine withdrawal syndrome have been reported to persist from hours to months after birth.<sup>[6]</sup>

## Overdose

Symptoms of midazolam overdose include:

- Somnolence (difficulty staying awake)
- Mental confusion
- Hypotension
- Impaired motor functions
  - Impaired reflexes
  - Impaired coordination
  - Impaired balance
  - Dizziness
- Coma

In animal models, the oral LD<sub>50</sub> of midazolam is 825 mg/kg.

Midazolam overdose is considered a medical emergency and generally requires the immediate attention of medical personnel. The antidote for an overdose of midazolam (or any other benzodiazepine) is flumazenil (Anexate®). The risk of midazolam overdose is increased significantly if midazolam is abused in conjunction with opiates as was highlighted in a review of deaths of users of the opiate buprenorphine in Singapore.

## Legal status

Midazolam is a Schedule IV drug under the Convention on Psychotropic Substances.<sup>[8]</sup>

## Popular Culture

Midazolam is offered to death row inmates before execution in the United States, according to the film *The Missouri Protocol* (1990). A Missouri prison doctor interviewed in the film said virtually no prisoners turned down the drug when it was offered a few hours prior to execution.

Prolonged after-effects of midazolam dosing after dental surgery inspired Duran Duran vocalist Simon Le Bon to entitle the group's 1997 album *Medazzaland*, likely in reference to psychotropic effects he experienced.

Used by Alexander Mahone in the show *Prison Break*, under the alias "Veritil."

## See also

- Benzodiazepines















































Statements of other Doctors

Cunningham	Date	Reference page
<b>Code A</b>	13.05.05 @ 13:10:05	3 g
	10.12.04	8 i
	04.10.04	9 nn
	04.10.04	9 oo
	26.11.04	9 pp
	26.11.04	9 qq
	24.10.05	6 k
	15.03.05	6 l
	10.12.04	5 k
	28.09.04	6 p
	20.12.04	6 u
	19.05.05	6 s
	27.09.0 @14:14	File 3 dd
27.09.0 @15:19	File 3 ee	
07.06.00	File 3 rr	



# Oramorph® Oral Solution 10 mg/5 ml

(morphine sulphate)

## Patient Information Leaflet



### What You Should Know About ORAMORPH Oral Solution

*Please read this leaflet carefully before you start to take your medicine. It contains a summary of the information available on your medicine. The information in this leaflet applies to ORAMORPH Oral Solution only. If after reading this you have any questions ask your doctor or pharmacist.*

The name of your medicine is ORAMORPH Oral Solution. Each 5 ml contains 10 mg of Morphine Sulphate as the active ingredient.

The solution also contains the following inactive ingredients: sucrose, corn syrup, methyl parahydroxybenzoate (E218), propyl parahydroxybenzoate (E216), ethanol and purified water.

ORAMORPH Oral Solution is available in bottles of 100 ml, 300 ml, and 500 ml.

The Product Licence and Product Authorisation for ORAMORPH Oral Solution are held by:

Boehringer Ingelheim Limited,  
Ellesfield Avenue,  
Bracknell, Berkshire, RG12 8YS,  
United Kingdom

and the solution is manufactured by Istituto de Angeli S.r.l.,  
Località Prulli di Sotto n. 103/C  
50066 Reggello (FI)  
Italy

### How ORAMORPH Oral Solution Helps You

ORAMORPH Oral Solution belongs to a group of medicines called opioid analgesics which are used to relieve severe pain.

### Before Taking ORAMORPH Oral Solution

Tell your doctor or pharmacist if:

- You are pregnant, trying to become pregnant or if you are breast feeding
- You have problems with your lungs or breathing
- You suffer from asthma
- You suffer from emphysema
- You have recently suffered from a head injury
- You have had an operation within the last 24 hours
- You suffer from shock (circulatory failure)
- You suffer from liver or kidney disease
- You are a man who suffers from prostate problems
- You suffer from convulsions (fits) or you have raised pressure within your skull
- You suffer from an under-active thyroid gland or myxoedema (swelling of the skin found in patients with an under-active thyroid gland)
- You drink alcohol
- You are hypersensitive or allergic to morphine sulphate or any of the ingredients listed above
- You suffer from phaeochromocytoma (a rare benign tumour arising from the adrenal glands)
- You suffer from kyphoscoliosis (abnormal curvature of the spine)
- You suffer from paralytic ileus (loss of intestinal movement), obstructive bowel disorders or prostatic hyperplasia
- You suffer from adrenocortical insufficiency (under-active adrenal glands)
- You are severely overweight
- You are taking any other medicines, in particular: cimetidine, domperidone, metoclopramide, ritonavir, mexiletine, esmolol; monoamine-oxidase inhibitors (medicines to treat depression) at the current time or within the last two weeks; tranquillisers, hypnotics, sedatives, antipsychotics or tricyclic antidepressants or you have recently received an anaesthetic

If you take this medicine before giving birth or whilst breast feeding, it may slow down the baby's breathing.

This medicine is not suitable for patients who are unconscious.

**If in doubt, ask your doctor or pharmacist.**

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**WARNING:**

This product contains 10 vol% of alcohol (ethanol). Each dose contains up to 0.81 g of ethanol. Caution! This medicine must not be taken by children (unless recommended by your doctor), pregnant women and people suffering from liver disease, epilepsy and alcoholism and brain injury or disease. Reactions in road traffic and while operating machinery may be lowered. May modify or increase the effect of other medicines.

This medicinal product contains 30 g of sucrose in the 100 ml bottle, 90 g of sucrose in the 300 ml bottle, and 150 g of sucrose in the 500 ml bottle. When taken according to the dosage recommendations each dose supplies up to 3 g of sucrose. Do not use if you are known to suffer from a bowel condition that makes you intolerant to certain sugars such as fructose, glucose, galactose or sucrose.

**ORAMORPH MAY CAUSE DROWSINESS, WHICH MAY IMPAIR YOUR ABILITY TO DRIVE. YOU SHOULD NOT OPERATE DANGEROUS MACHINERY. AVOID ALCOHOL.**

**How To Take ORAMORPH Oral Solution**

Follow your doctor's instructions about when and how to take your medicine, and always read the label. The usual recommended dosage is as follows:

**Adults:** one or two 5 ml spoonfuls every 4 hours  
**Children 6-12 years:** half or one 5 ml spoonful every 4 hours  
**Children 1-5 years:** half a 5 ml spoonful every 4 hours

For some patients, it may be necessary for the doctor to prescribe higher doses. For some patients (for example the elderly, patients with kidney or liver problems and those patients where sedation is undesirable) reductions in dosage may be appropriate.

Your doctor will adjust the amount of ORAMORPH Oral Solution you take according to your individual requirements and the severity of your pain.

**Not to be given to children under 1 year**

**Do not take more than your doctor has prescribed.**

**Do not stop taking this medicine except on your doctor's advice.**

**In the event of overdose, consult a doctor immediately.**

A large overdose of ORAMORPH Oral Solution can cause pinpoint pupils, depress breathing and lower blood pressure. A very high dose could slow down blood circulation and cause long periods of unconsciousness, or even death. In children a high dose may cause convulsions (fits).

If you forget to take your medicine, take it when you remember and simply take the next dose at the usual time.

**After Taking ORAMORPH Oral Solution**

All medicines can sometimes cause side effects. The commonest side effects of ORAMORPH Oral Solution are feeling or being sick, constipation, drowsiness and confusion.

Difficulty in passing urine, abdominal pain (caused by tension in the tissues that carry urine to the bladder and bile to the intestines), dry mouth, sweating, facial flushing, dizziness or unsteadiness, bradycardia (decrease in heart rate), tachycardia (increase in heart rate) palpitations, orthostatic hypotension (temporary fall in blood pressure on standing causing dizziness), hypothermia (reduced body temperature), headache, restlessness, irritability or changes in mood, hallucinations, muscle rigidity, decreased sexual drive, miosis (constriction of the pupils) and raised pressure within the skull can also occur. Allergic skin reactions and itching may occur in some people.

You may become tolerant to or dependent on ORAMORPH Oral Solution as with any morphine product.

If you experience any of these side effects and they persist or become troublesome, consult your doctor.

If you experience any other effects not mentioned above, consult your doctor or pharmacist.

**How To Store ORAMORPH Oral Solution**

Do not store ORAMORPH Oral Solution above 25°C, and store in the original container in order to protect from light.

Please return any remaining medicine to your pharmacist 90 days after first opening.

ORAMORPH Oral Solution should not be used after the expiry date which is printed on the bottle label and carton.

**Keep this medicine out of the sight and reach of children.**

This leaflet was amended in July 2006.

Remember this medicine is for you. Only a doctor can prescribe it for you. Never give it to others as it may harm them even if their symptoms are the same as yours.

































































