6d. Science and Alchemy

Revolution D100 ver 1.0 - 15-Oct-2016. The following text is designated as Open Game Content.

Weird Science is a sub-system that does not grant powers, but rather the ability to create and operate gadgets which, while described as scientific devices, are in fact more akin to powers in their effect than to real world devices. It is typically found in pulp, planetary romance or steampunk settings. By limiting their use to the creation of potions and poultices, as well as bombs or enhanced projectiles, you can use these rules for Alchemy, too.

Prerequisite

Before learning Devices as Traits, a character needs the appropriate Science Trait. This is always a Knowledge Trait, and it allows the scientist to create power sources and basic ammunition without the need for specific Device Traits.

Blueprints

Weird Science requires the creation of blueprints for its artefacts, or "recipes" for Alchemy. Blueprints can also be found as treasure. Although a Device Trait allows the scientist to create any variant of the appropriate device or drug, the creations are usually limited to gadgets for which the scientist has a blueprint ready.

Device creation

To create an object from scratch, make a Conflict against the Item Value. To repair, reactivate, recharge, or figure out how to use an item, the Conflict is against the Value of the device, plus damage if quantified, but the Challenge Rating is will be lower (see below). The Skills used are Craft to repair or create, and Knowledge to create something new or learn how to use something the scientist has never seen before.

The opposition Challenge Rating is always 50%, except when creating a blueprint or creating an item without a blueprint, in which case it is 80%. When restoring or repairing a device, of simply figuring out how to use it, the Challenge Rating is 20%.

Starting equipment

As a rule of thumb, a scientist starts the game with a number of memorised blueprints equal to his or her Knowledge slots, and their basic Value cannot exceed 10% of the scientist's Craft or Knowledge Skill, whichever is higher. He or she usually has one sample item per Blueprint known.

Device flaws

Many devices or Blueprints will have flaws because of Consequences suffered in their creation. You may use the Flaw Tables, or borrow ideas from the tables provided for enchantments or weapons.

D10 roll	Consequence	Notes
1-3	Overcharge-prone. Whenever activated, the user rolls Operate versus a resistance of 50%, plus 30% for each extra minus sign. If the roll is failed, the device stops functioning after that use and must be reactivated with a Repair Conflict.	
4-6	When active, emits a buzzing noise that bestows a Penalty to any Concentration roll within 3d6 metres.	
8-9	When active, emits smoke that bestow a Penalty to Stealth rolls made by anyone in the party.	
10	Unstable. Whenever activated, the user rolls Operate versus a resistance of 50%, plus 30% for each extra minus sign. If the roll is failed, the user suffers electric or other energy damage of Might equal to the total number of minus signs. The item will still work if the Operate roll is a success.	Usually appropriate to equipment used in Combat.

Device flaw table

Drug flaw table

D10 roll	Consequence	Notes
1-5	Also acts as a poison of Might equal to 5 points plus 5 per minus sign, effect Immediate Paralysis.	
6-7	Bestows a Penalty of 1d6 to a Characteristic, chosen at creation time, when used to determine the starting size of a Resolution Point pool, once per adventure.	
8-9	Dizzyness. The drug will cause a Penalty to a Skill roll, similar to a Negative Consequence. The Narrator decides when to assign the Penalty.	
10	Paranoia. The drug user becomes incapable of overcoming one of his or her Motivations (Narrator's choice). The Motivation becomes immediately active and remains such for the duration of the potion effect. The character cannot perform direct actions against the Motivations, and must resist the Motivation with Willpower whenever the Narrator suggests he or she should do something bold or inconvenient because of the motivation, or actually do it.	The player MUST be informed that the potion will limit the character's free will.

Device attributes

Many devices have the Combine attribute, which means that they can be combined with one or more powers labelled as Science in the basic power list. Each Combined effect adds 1 to the Basic Value of the item, but all effects share the same Range and Target attributes as the main device. Might is a special case, and the device description will specify if all Combined effects have the same Might as the main device (the default case) or Might must be added separately to each effect, in which case the Might of all effects is counted towards the device Value.

If an item is listed as Combine 0+, it means that it usually has a typical, intrinsic effect that does not need the addition of other powers, but this effect can be substituted with something else from the power list or other devices. If an item is listed as Combine 1+, then it must be combined with other effects or devices or it becomes useless.

Device list

Clockwork Device

Item, Might 1+

This trait allows the creation of clockwork devices that can push, hold, operate or do something that goes beyond the scientist's capabilities. The STR or DEX of the device is equal to its Might, and can be added to the user's Characteristic when assessing the Starting Resolution Points in a Conflict of the appropriate type. Some sample devices are:

- Coil Ram: a small device usable to bash doors open with the Operate Skill.
- Clockwork Glove: a device that increases the wearer's DEX when operating on small devices.
- Spring Ladder: a device that helps climbing any surface up to Might metres.
- Auto-injector: a device that can be tied to a character's arm, ready to inject Might doses of a potion or drug without spending Strike Ranks for a Use Item Action.

Clockwork Spider

(prerequisite: Clockwork Device)

Combine 1+, Item, Might 1+

A self-operated device that can contain any combination of other devices, crafted separately, and be programmed to execute simple tasks. Its Size Class, equal to its Might, is normally not sufficient to allow meleé attacks, but it can use other devices or specially modified weapons. It can hold a number of devices and weapons equal to its Combine attribute. The general

type of devices the creature can mount must be specified at design or build time, but the actual device can be exchanged for another provided it belongs to the same broad category (limb, sensor, energy weapon, projectile weapon, etc.).

The creature gains 3d6 STR (proportional to the Size Class) and 1d6 DEX, plus 1d6 DEX per Might not spent on Size Class. It contains a replaceable energy source equal to its Basic Value sufficient to power all of its devices for one Combat, or one hour of other activities. All of its basic Skills are equivalent to the Operate Skill of the person programming it.

Energy Projector

Item, Might 1+, Projection, Range 1+

This device projects a peculiar kind of energy in a radius equal to its Range on the Combat scale. The energy may also be useful to harass something particularly sensitive to it, providing a Bonus in generic Conflicts or Basic Combat.

The energy can also be focused in a concentrated beam through a system of shutters. This allows also to use the projector as a rudimentary weapon which produces a one-time energy discharge of Might equal to the item's Might. Light, in this case, does not produce a laser, but rather a bright discharge that blinds the opponent if the damage is higher than its Constitution, or gives a temporary Penalty to its next roll if lower. Heat, Cold, Radiation and the like do damage normally to organic matter. The Projector trait is applied to the scientist's Ranged Combat or Operate. Someone with a very high Ranged Combat value can also use it.

After the discharge is released, or one hour of normal use, the projector needs to be recharged. A projector connected to a permanent energy source can fire one discharge per Combat round.

Enhanced Blade

Combine 0+, Item, Might 1+

The scientist creates a special blade with a saw or chainsaw effect, and may also combine one [Element] Blade effect provided the total Might is at least 3. The blade can also be given an improved damage effect at the cost of one point of basic Value per level of effect. Adding Slash (effect) to a non-slashing weapon adds 2 to Value. The effects can be applied to any type of weapon, but a different Blueprint is required for each.

A non-weapon item like a glove or a robot limb can be turned into a weapon in this way. In this case its basic damage is 1d(Might*2) and needs the addition of any Damage effects, but it can ignore any negative Might due to low STR or Size Class.

Enhanced Projectile

Combine 0+, Item, Might 1+

The scientist creates a special projectile with improved mundane characteristics as described in the equipment section, and/or adds the [Element] Arrow effect. The Palsy effect can be added by combining the ammunition with the Paralyzer device. The effects can be applied to any type of ammunition, but a different Blueprint is required for each.

Ammunition is a one-use device, so its total Value is equal to the base Value multiplied by three, not by four. It can be manufactured in batches by adding one to Value (after the multiplication, not before) per projectile after the first.

Enhancing Drug

Combine 1, Item, Might 1+, Target 1 individual

This potion must be combined with one Enhance [Characteristic] power. It has the same effects and limitations as the basic power. Usage of other basic powers such as Grant [Trait] or Absorb [Energy] require Narrator's permission, and usually the possession of a specific Stunt or of an equivalent power.

Goggles

Item, Might 1+

These devices can either be used to give the character Acute Vision when looking at something small or in adverse conditions (darkness, smoke, etc.), or to detect something peculiar and specific when worn (Infrared/Heat, Radium radiations, a toxin, etc.) They provide a Support Bonus to Perception in investigation Conflicts, or even in other Conflicts not directly related to their object when appropriate, and add their Might to the starting Resolution Point total when facing the exact problem they were designed for.

Grenade

Combine 1, Item, Might 1+

This device is an explosive grenade of equal Might, or a flashing or energy-releasing grenade. The effects are similar to those of the one-time discharge of an energy projector. It also allows the creation of Smoke grenades which can fill an area with smoke, lasting for Might Combat rounds. If combined with Potions or Poisons it allows the creation of various poison gas grenades, or tear gas if combined with Paralyzer.

Healing Potion

Item, Might 1+, Target 1 individual

The potion works like a Heal power of equivalent Might. The scientist can also create antidotes for venoms or diseases with this Trait, assuming he or she has a clear knowledge of the target ailment. Their Might is the same as that of the potion.

Paralyser

Combine 1, Item, Might 1+, Target 1 individual

This device paralyses the target like the standard power. Paralysis lasts for the current Round plus one Round per Might in excess of the target Size class, and cannot occur at all if the target is of Size Class greater than Might. It must be combined with another device that acts as the vessel to deliver its effect. The total Might of the Combined device must be split among Paralyser and other effects, if any.

- If combined with Energy Projector it acquires the Projection and Range * attributes. It works as a one-time discharge when not connected to its own energy source, or as a weapon that can be fired once per round if connected to an energy source.
- If combined with Enhanced Blade, it must hit its target in Combat to release a one-use paralysing discharge of the appropriate Might.
- If combined with Grenade or Enhanced Projectile it allows the creation of paralysing ammunition or grenades.

Poison

Item, Might 1+, Target 1 individual

The potion is a poison with Might equal to 1d6 per Might of the potion, rolled at application time. The standard effect of a poison is Death. The scientist can add effects like Confusion or Palsy from the list of those available to Science. These contribute to the potion Value according to their basic Might, and replace the standard effect of Death. Instant effects add double their Might to the potion Value, and allow the poison to be deadly, in addition to inflicting the effect.

The scientist can also create an antidote to any Poison he or she knows, with a Might equal to 1d6 per Might of the potion. This is stronger than antidotes created with the Healing Potion Trait.

Protective Coil

Combine 0+, Item, Might 1+

This device protects a single person or a human-sized object from an energy type. It provides Absorb [Energy] of that type, absorbing up to its Might from all attacks from that energy type, losing Might as it soaks off damage. As the device is effectively one-use, its total Value is its Might multiplied by three. A coil designed to absorb kinetic energy will "soak up" the damage bonus of physical attacks, but not the damage dice of the weapons proper. Using the Combine attribute allows the coil to block more than one kind of energy, but the total Might stopped is always the same.

Example

Professor Rathas knows the Clockwork Device, Clockwork Spider, Enhanced Blade and Energy Projector devices. He wishes to create a powerful defence automaton.

First of all, he designs the spider chassis. He goes for a Might of 3, which he splits between Size Class 1 and +2 dice to DEX for a total of 3d6 DEX, and a Combine of 2, so the total Value of the chassis is 5, which becomes 20 for a permanent item. Rathas has an INT of 17 and a total Skill of 79, including Traits, so he manages to create the Blueprint losing only 12 Resolution Points. The Narrator splits the resulting Consequences between a permanent "Reputation as a Creator of Monsters -" that will forever haunt him when he interacts with people in his home town and a 1d6 STR flaw for the automaton. The permanent social Penalty is harsh, but it is a fair price for being able to build a legion of automatons.

Then the Professor designs the first two of the many interchangeable devices. He decides that the creature will mount a weaponized limb and an energy discharger.

The weaponized limb is a variant of the Enhanced Blade. The Professor goes for a classic rotating saw limb of Might 3 (1d6 damage) with the addition of 1 point of Slash effect (it will trigger on an Advantage roll), which gives us a basic Value of 4. The Professor faces a total Value of 16 and prevails with only 8 points lost, for a total of one flaw. The Narrator consults the additional features table in Chapter Five and decrees that the weapon has a + 1 SR cost when attacking, for a total of 4 SR. Annoying, but still functional.

The energy projector is just a simple electricity discharger. The Professor goes for a one-use first prototype with Close Range, Might 2 and Target 1, for a total Value of 4 (12 when modified for a one-use item). He manages to win the Conflict without losses, and the one-shot discharger Blueprint is ready for mass production.

The final result for version 1.0 of the small automaton is:

STR 2d6 DEX 3d6 Size Class XS Base SR (5d6) /2 (average 9), with a -4 Penalty in Close Combat with human sized opponents. Weapon 1: saw, SR 9+3, SR used to attack/parry 4/2, damage 1d6, Slash (advantage) Weapon 2: electricity projector, SR DEX+20, SR used to attack 5, damage 2d6 (one shot per Combat)